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Ringwood Manor

THE HOME OF THE HEWITTS

By

EDWARD RINGWOOD HEWITT

Trenton, N. J.
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1735879

To my Mother, who loved Ringwood and built it into a home for the family and who always showed such wonderful love and understanding to all her children.

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CONTENTS

Chapter Page

Introduction vii

I. A Sketch of the History of Ringwood 1

II. A Short History of Iron Making 12

III. Economic Conditions at Ringwood 20

IV. Change From An Iron Works To a Country Estate 33

V. Boyhood Life At Ringwood 49

VI. George Waldron 69

VII. Incidents At Ringwood 81

VIII. Ringwood Guests 87

IX. House Parties 100

X. Family Idiosyncracies 105

Conclusion 110

INTRODUCTION

As I am now at the age of seventy-nine, the last living member of the Hewitt family who lived at Ringwood for seventy-five years, and being the only one of the family born at Ringwood, it seems proper that I should write an account of the place, giving a short history of its development from a primitive forest area to that of a country residence of the family; also sketches of the life we lived there, with as many amusing and interesting incidents as remain in my memory, so as to give life to the old Manor where no one now lives.

Mr. Alden Cottrell has written for the State of New Jersey Department of Conservation an account of the Manor gathered from available documents, which is an excellent history of the place, and I would advise anyone interested in the Manor House to read it. I plan to write a little fuller history together with an account of the economic development, especially with reference to its iron industry. As our modern civilization is fundamentally based on iron and steel, the early history of this industry in this country should be of interest to all of us. Ringwood occupied a foremost place in the beginnings of our iron business. The family of one of the early owners, the Ryersons, still carries on in the steel business, being the oldest name in this industry in this country at the present time. During the Revolution, Ringwood and its Manager, General Robert Erskine, played an extremely useful role, while General Washington stopped there many times on his way from the Hudson Valley to Morristown.

It was my father's wish for many years before his death, that Ringwood Manor should be kept in the family as a sort of rallying place for future generations of Hewitts, as is the custom with English country estates. However, our American civilization does not lend itself to such plans, because it is not the custom here to entail a large part of the family fortune to one member of the family, whose duty it is to maintain the ancestral home for the family.

As this plan was not feasible, the best that could have happened has taken place, in the preservation of the home as a public park and museum. I would not personally want the responsibility of such an estate, even if I had inherited the income to maintain it, and am most grateful for the present outcome.

It will give me great pleasure if I succeed in giving others a glimpse of the life we lived in this charming old home.

The Hewitt Family

The family at Ringwood consisted of my father and mother and Peter Cooper, our grandfather, who came up several times each summer for a week or so. There were six children. Amy, the eldest daughter, was considerably older than I, by ten years. Sally was next, being about two years younger than Amy. Cooper came next, two and one-half years younger than Sally, while Nellie was only two years older than I was. Erskine, the youngest, was four years and eight months younger than I. The younger children were still playing childish games when my sister Amy began to have suitors. She was most attractive looking, although she had a harelip which had been operated upon and did not show appreciably. She had a fine voice and sang well. Sally, when young, was much of a tomboy. She was not good-looking, with a flat figure, and liked to play with the boys and lead them in pranks. She was clever, but unscrupulous and tricky, so that neither Cooper nor I ever cared for her. In later life she made much trouble in the family.

Cooper was always very energetic and full of life and bubbled over with new ideas and inventions. He was one of the most attractive persons I ever knew, and a man of remarkable abilities.

Nellie was blond and good looking. She had a fine disposition and was most affectionate and generous. In later life she became dominated by Sally. I was always most fond of her.

Erskine was never an agreeable character even when he was young. He rarely took part in our games, like other children, and seemed rather morose and self-centered. He was not as strong physically as Cooper and I. We never got along together, and in later life had serious differences. I have no pleasant recollections of him, either as a boy or later on. Nellie and Cooper being more my own age were my close companions in youth. We were always great friends. The two older girls had different interests as they grew up, but I was very fond of my sister Amy, who did everything she could for me all her life. She was a very fine character in every way.

My father, besides being a very distinguished business man and public citizen, took a great part in the family life and was always devoted to his children and did all he could for our pleasure and happiness. He was a most wonderful father in every way. His vast erudition on all subjects was a constant source of education to all who were with him. He was the best of company, and the cleverest conversationalist I ever knew.

My mother was quiet, gentle, and affectionate, always kind and generous to all, and most long suffering with us children. With all her quiet ways she had a mind of her own and usually got her own way in everything she wanted. She directed the family much more than would appear to a stranger. We all had the deepest affection for her. She was the model mother for that time and for such a family.

With this sketch of the personalities of the family, the incidents of our life at Ringwood should be better comprehended.

RINGWOOD MANOR

CHAPTER I

A SKETCH OF THE HISTORY OF RINGWOOD

INDIANS were, of course, the first occupants of the lands of Northern New Jersey. They were a tribe of the Nation of the Delawares called "Leni Lenape" by the Algonquin tribes living to the north of them—a name which means, in their tongue, "Old Women", because they were poor fighters. The Indian settlement nearest to Ringwood was located at Pompton, along the banks of the Long Pond River or Wanaque, which is now called the Greenwood Lake stream, an ideal location for an Indian village, because from there they could ascend the valleys of three rivers, and also travel by canoe to tidewater with only two carries—one at Little Falls and another at Paterson Falls. The landing on the Passaic River bank at Passaic, below Paterson, bore the Indian name of Alquaquanac for over two hundred years.

Indians cultivated corn on the flat lands near Pompton and hunted the surrounding forests. Primeval hardwood forests do not furnish large amounts of food for the support of big game, because the ground is mostly covered with leaves, with little undergrowth for animal feeding. For this reason the Indians are reported to have often burned the forests in places to make more food for game. Deer and bear must have been fairly numerous, while beaver inhabitated all the streams where they could make their dams. Many of the valleys still show signs of having been beaver meadows. Wild turkeys were surely numerous, as they had plenty of feed from the great crop of acorns from the many oak trees. I knew people, when I was a boy, who had shot wild turkeys and said that they were once in great flocks. Tremendous flights of wild pigeons passed over this part of the country in September, and the Indians must have netted vast numbers of them as did the white settlers later. I, myself, saw and shot some of the last of the wild pigeon flocks. Trout were in all the streams, and many of the lakes. This must have been an Indian paradise, until invaded by the white man.

In 1730 Lord Stirling engaged Cornelius Board, a Welsh miner, to come to America to search for copper mines. The Schuylers were, at that time, profitably mining copper ores at Belleville, N. J. Board failed to find any additional copper mines and settled at Little Falls, where he built a grist mill. At that time the country had been somewhat settled by farmers, mostly of Dutch ancestry, and their farms stretched from Newark to Pompton. The hilly, forest country beyond Pompton was then all a wilderness, with no white inhabitants in it. Indians told Board of the existance of outcrops of iron ore in the hills and showed him the country. He found many large and rich ore outcrops extending over a wide range of country.

Cornelius Board secured fifty acres of land at the outlet of Stirling Lake from the East Jersey Proprietors, as this region was at that time considered part of New Jersey. This title was verified by an Act passed in 1772 to confirm the titles to settlers along the New Jersey boundary just established by the Royal Commission.

Board called the iron works "Stirling", after his patron, the Fifth Earl of Stirling, who had sent him to America. This Earl of Stirling died in 1739. William Alexander, the pseudo Earl of Stirling of the

American Annals, was then only thirteen years of age. He was born in New York in 1726. His father, James Alexander, had come to America in 1715. In 1755 William Alexander went to England to prosecute his claim to the Earldom of Stirling. In this he was unsuccessful, returned to America and thereafter signed himself as "Stirling", under the name of Lord Stirling became famous in the annals of the Revolution.

In a lawsuit to settle the rival claims of the Wawyanda and Cheesecook Patents, which was tried at Goshen, where both Alexander Hamilton and Aaron Burr appeared from Waylanda, James Board, the son of Cornelius Board, testified that his father had built a bloomery and forge at Stirling Lake in 1736, which he later sold to his partner, Ward, and removed to Ringwood in 1740. This seems to establish the date of the beginning of the Ringwood Iron Works definitely as 1740.

Cornelius Board took up the land of the Ringwood valley, and also along the Long Pond River, later building his own house at Boardville, where the Long Pond River and the Ringwood River join. This land later became my own farm. Board built an iron forge at Ringwood in 1740. This was located below the dam of the mill pond beyond the gate entering the Manor House grounds. Even today, iron cinders and slag can be found in the ground below the dam. I have often snagged and cut my fishing line on the sharp edges of the old cinder lumps in the bottom of the stream below the dam.

The Ogden family of Newark bought the forge from Cornelius Board about 1742, and built an iron furnace at Ringwood, which was located where the bank above the old dairy is cut by the present waterfall. The Ogdens called this enterprise "The Ringwood Company". Tradition says the name was taken from the estate of Ringwood in Hampshire, located on the Avon. There is no definite evidence that this was the source of the name.

The Ogdens were evidently not particularly successful in making money at Ringwood. This is easily understood, because it required a large outlay of capital to operate in such a remote district. They finally offered the business for sale by public advertisement in 1762.

Peter Hasenclever, a German merchant and a member of an old iron master family of Remscheid, in the German Rhineland, was engaged in mercantile business in Cadiz, Spain, but moved to London, as he says, in order to secure more personal freedom. He at once started another mercantile firm in London—Hasenclever, Crofts and Seton—but his adventurous and enterprising spirit was not satisfied with a simple merchant business. He wanted the direction of a large enterprise, and when he heard of the remarkably rich discoveries of iron ore in the American colonies, he organized a syndicate in London, composed of a number of leading merchants, to secure and operate some of these mines.

This business was an extremely attractive venture at that time because of the high price of iron ($100.00 per ton) and the fact that wood for charcoal was becoming scarce in England, where charcoal furnaces had been operated since early Roman times.

It was agreed that Hasenclever should go to America and secure iron properties, with the authorization from the Syndicate to expend 40,000 pounds sterling on the venture. When he landed in New York in 1763, he had not yet located any iron property, although he had already sent to America over five hundred German miners, forgemen, furnacemen and charcoal burners, carpenters and other craftsmen, and their families.

The Ogden advertisement of the Ringwood property immediately appealed to him and he purchased the property at once. This was the beginning of an extraordinary development for those times. He states he found the Ringwood furnace in bad condition, with the blowing machinery in poor shape. He at once set about getting the enterprise on its feet with surprising energy. In his published book he states that he built at Ringwood—1 furnace; 4 forges and 11 fires; 1 stamping mill; 5 coal houses; 3 blacksmith shops; 17 frame houses with bricks; 4 square log houses; 3 stone houses; 1 store house; 25 colliers' houses; 1 sawmill; 1 grist mill; 1 horse stable; 1 carpenter's shop; 4 barracks and barns; 1 reservoir; 4 ponds; 2 bridges. At Long Pond, at the site which is now called "Hewitt", he reports he built 1 furnace; 1 forge and 4 fires; 2 coal houses; 2 blacksmith shops; 4 frame houses; 6 log houses; 1 store house; 6 colliers' houses; 1 sawmill; 1 horse stable; 1 reservoir; 2 ponds; 2 bridges. All this, with an almost equal amount of construction at Charlotteburg and Cortlandt, New York. It seems incredible that such an amount of work could have been done in the short space of under two years. At the same time he reports that he purchased 122 horses, 214 draft oxen, 51 cows, and a vast number of tools. He opened and examined 53 different iron mines. Is it any wonder that he expended 54,000 Pounds instead of 40,000, and that he became over-extended and unable to carry on?

His work did, however, establish Ringwood as the most complete economic unit in America at that time. One of his contributions was the construction of a dam across the end of Tuxedo Lake, 860 feet long and 12 to 22 feet high, in order to run the water from the lake down to Ringwood so that there would be enough water to run the waterwheel at the furnace for driving the blast at all times. The water from the lake was led by a ditch from the south end of the lake into a brook flowing into the Ringwood River. This ditch can still be seen to the East of the wagon road near the south gate of Tuxedo Park. Water flowed to the Ringwood River in this way for over one hundred years before it again reached Ramapo, as it does now.

In 1765 Hasenclever was called back to England and endeavored to secure more money. Failing in this, he returned to America in 1767, but departed finally in 1769. He went through bankruptcy in London, after writing a book defending his actions in America, called "The Remarkable Case of Peter Hasenclever", which provides much interesting material bearing on business in Colonial times. There are several copies of this rare book in libraries in America.

The London syndicate, which called themselves The American Company, took several years to secure a suitable manager for their American interests. While their search was proceeding, two managers operated the property:—Mr. Homfray, sent out from England, and John Jacob Faesch, who had come over with Peter Hasenclever. Neither of these men left any lasting impression on the property. Finally, Robert Erskine was selected for the place, and given ample opportunity to study the English iron industry before his departure for America. Erskine was the son of the Rev. Ralph Erskine, of Dunfirmline, Scotland, the famous preacher, of whom one of his parishioners wrote: "He preached eloquently for two hours until he reached thirty-fifthly in his argument, and we would gladly have listened to him an hour more," What a preacher and congregation!

Erskine was at that time a well known engineer and inventor. His invention of the centrifugal pump for unwatering sailing ships had won him such distinction that he had just been elected a Fellow of the Royal

Society—Benjamin Franklin being one of his sponsors.

Erskine arrived in New York in the autumn of 1771, and at once assumed the management of the Ringwood property, which he found in poor condition. He retained John Jacob Faesch for a time, but they soon disagreed, and Faesch departed to start an iron business of his own. Struggling for two years, with no help from the owners, he finally offered the property for sale, but finding no buyers, he was obliged to rely on his own efforts. He secured some loans from bankers in New York, which were later all repaid. The property was just getting into successful running shape and making money, when the Revolution began.

As soon as war was declared, Erskine took the side of the Colonists, raising the first Company of soldiers in Northern New Jersey, and equipping them at his own expense. He was soon commissioned Captain by the Continental Congress, and instructed to keep his Company at Ringwood in order to protect the iron works and the army stores collected there. In anticipation of war he had secured a large supply of powder, which at that time was almost unprocurable. No military raids ever came nearer to Ringwood than those in the Ramapo Valley below Suffern.

During the Revolution there were dangerous bands of Tory outlaws, who roamed the whole countryside, particularly in what is now Orange County. The worst of these was led by a desperado named Claudius Smith, who had one of his hideouts up Stony Brook, beyond Sloatsburg, and another within what is now Tuxedo Park. He was finally captured at Oyster Bay, Long Island, and hanged at Goshen. It must have been members of this gang who once visited Ringwood and robbed Mrs. Erskine, at night. Ringwood was considered a particularly safe place in those troubled times, because of the company of soldiers stationed there.

Washington, requiring a good surveyor and geographer for his staff work, heard of Robert Erskine, and after interviewing him asked to have him commissioned by the Continental Congress as Geographer and Surveyor General. Erskine served in this capacity until his untimely death in 1780. He supervised the making of over two hundred maps for the Army, and fifty-five of his own drawings are still extant. One particularly fine specimen is now in the J. P. Morgan Library, with annotations in Washington's own handwriting. The New York Historical Society has a large number.

It is because of Erskine's early death, probably from pneumonia, in 1780, that he is not well known in history as one of Washington's trusted officers. My brother, Erskine Hewitt, employed Albert H. Heusser to get together all that is known about Robert Erskine, and he has published a book called "The Forgotten General", which tells a most interesting history of that period.

George Washington attended Erskine's funeral at Ringwood, which took place the same day André was shot. He came to Ringwood from Newburgh. It is said that he planted the oak tree which used to stand beside the grave until it was killed by lightning, but this can scarcely be so, because a tree of that great size must have been at least 250 years old when I was a boy. My father believed that Washington paid for the tomb, but I have found no definite evidence of this.

After Erskine's death the property was managed by Mrs. Erskine, under orders from Congress, which held the property for the British owners. She married Robert Lettice Hooper a year after Erskine's death, and they together operated the property. Their conduct of the business was unsuccessful, as would be expected, and it was sold in 1807 to Martin John Ryerson, who then had iron works at Pompton Lakes nearby.

It is not known whether he pulled down the house, or whether it burned, but we know that he built a new house about that time which was located behind the old site to the North. This building forms the west end of the present house.

Martin John Ryerson was most successful in his operation of the iron works, which at that time proved very profitable. There are orders extant for shot and shell made for the Army during the war of 1812. He passed away in 1832 and the property was inherited by his two sons. Jacob M. Ryerson lived in the Manor House at Ringwood, and ran the iron works. He does not seem to have inherited the business ability of his father, and allowed the workmen to overdraw their accounts at the Company store to such an extent that real money became very scarce at times, so he was obliged to issue paper money of his own, redeemable at the store in goods. My father had a number of these shin plasters at one time.

Even though the use of hot blast for the furnace was adopted, and the Morris Canal Company built the present dam at the foot of Greenwood Lake in his time, Jacob Ryerson failed to make the property pay, but got more and more deeply in debt until it was finally sold at Sheriff's sale to my grandfather, Peter Cooper, of New York, in 1853. The Ringwood furnace had been finally blown out in 1848, after having been operated 106 years.

The Ringwood property was run for Peter Cooper by Cooper and Hewitt, the partnership of his son, Edward Cooper, and his son-in-law, Abram S. Hewitt. They had large iron works at Trenton, New Jersey, which could use all the iron they could make, and the Erie Railroad was completed from Pierremont, on the

Hudson, to Goshen, in 1848, so that iron could be shipped from Sloatsburg, a distance of only four miles, instead of twenty-five miles to Haverstraw by team, or twenty miles to Aquacanac landing on the Passaic River.

This put a new aspect on the cost of iron delivered at tidewater, and when the New York and Greenwood Lake Railroad was completed to Ringwood and the Hewitt furnace in 1872, their shipping costs were still further reduced. They built a gravity, narrow gauge railroad from the railroad to the mines, on which the ore came down by gravity, while the empty cars were pulled back by mules, or horses. They rebuilt the furnace on the Long Pond Stream, at which is now Hewitt, in the most up-to-date manner. This furnace produced from fifty to seventy-five tons of iron a week. They even planned a larger furnace for which Edward Cooper intended to use a ninety foot diameter overshot water wheel. The pit for this was built and can still be seen north of the old furnace. The wheel, however, was never completed, because it was decided this location was not, at that time, profitable for such a large furnace. Hewitt Furnace was finally blown out and abandoned in 1887.

After that, ore was shipped from Ringwood very profitably, until the late eighteen-nineties, when there were no longer enough furnaces which could be reached at reasonable freight rates to take the ore, and the processes then in use required ores of lower phosporous content than the Ringwood ores, because the Bessemer process of making steel was almost universal at that time, and phosphorous must be very low in ore for making steel by this method.

The mines struggled along with insufficient sporadic business until 1930, when they were shut down for lack of orders for ore. In 1942 the United States Government bought the mines for an emergency source of ore supply for the war, and they have been put in shape to operate. Drilling has indicated there are at least 5,000,000 tons of ore in the known ore bodies below ground, after over 2,500,000 tons had been mined, and the amount available may be much larger than this. The U. S. Government has lately offered the mines for sale.

Abram S. Hewitt, and his wife (my father and mother), spent their first summer at Ringwood in 1857, and from that time until the death of Miss Sarah Hewitt in 1930, the house was occupied as a country place by the family. My brother Erskine, who never married, did not want to keep up such a place for himself alone, so he finally presented it to the State of New Jersey as a park and museum. The lower part of the Ringwood farm, which was inherited by Mr. Norvin Green, has recently been given to the Cooper Union to be used as an outdoor engineering school.

This disposition of the property, I am sure, would have been most heartily approved by all the family, if they were still alive.

CHAPTER II

A SHORT HISTORY OF IRON MAKING

THE earliest method of making iron was almost certainly by building a fire on top of an exposed outcrop of iron ore. Iron ore is the oxide of iron, or simply a combination of iron and oxygen. The incandescent carbon of glowing coals has a greater affinity for oxygen than has iron, therefore it will remove the oxygen from the iron ore at a red heat and reduce it to metallic iron.

Iron made by this simple process is an impure wrought iron mixed with the impurities from the ore. This type of iron has such a high melting point that it will not become liquid in the heat of a simple fire, but will only become pasty and more or less soft. If this red hot pasty mass is pounded on an anvil with a hammer so that it is worked sufficiently, the impurities in it will be expelled to a great extent, and a more or less strong, serviceable iron result. This is called wrought iron and is the type of iron the blacksmith uses in his forge, although our present wrought iron is no longer made by this simple process.

The next forward step in iron manufacture was the making of a small furnace by enclosing a space with stones and clay, which could be filled with wood or charcoal mixed with iron ore. The air for the combustion of the fuel was admitted at the bottom of the furnace and the draft supplied by the wind, or by a bellows made of skins which were inflated by being pulled open by strings, and made to blow the air by treading on the skins. Valves were not invented for bellows until the fifth century A.D.

We believe that iron was used as early as 3000 B.C. and we have samples of iron weapons dating from 1500 B.C. Tubal Cain is referred to in the Book of Genesis as the first smith, indicating the great antiquity of this art. A large amount of iron was found in the ruins of Nineveh, dating from 880 B.C., which was probably a store of metal for making arms. Iron became much more common in Roman times and they seem to have had considerable amounts of it. I saw two billets of wrought iron excavated from a Roman farmstead in Gloucestershire, England, which would weigh about 600 pounds each. This was evidently their stock for the making of tools and arms.

The improvements in making iron during Roman times consisted of gradually increasing the height and size of the furnace and the amount of the blast, which finally was operated by water power. The Romans, however, never succeeded in reaching temperatures within the furnace sufficiently high to melt iron. All their iron was made by the process described above and refined by working on an anvil. They did make some steel from this wrought iron by treating it with charcoal under suitable conditions in the fire.

When a certain temperature is reached within a blast furnace there comes a point where the iron absorbs carbon, and when this has taken place to the extent of about 3½% the iron melts to a liquid, at a temperature of 540 degrees F. lower than the melting point of pure iron. This molten iron will flow to the bottom of the furnace and collect there, if not allowed to escape. When this molten iron is run off, it can be cast in moulds and is known as cast iron. This metal is brittle and cannot be bent without breaking and cannot be worked by a hammer when hot. Metal of this kind was first produced in England about 1345 A.D., by increasing the height and the amount of blast in the furnace, and was a new type of metal unknown before that time. The problem then was to find out what to do with it.

Soon it was discovered that cast iron could be heated in a forge fire with charcoal and refined into wrought iron by burning out the carbon of the cast iron with the hot gasses of the fire. This process was called forge work, or bloomery process. It was found much more economical to first produce cast iron, and then refine it to wrought iron, than to make the wrought iron direct from the ore, as was originally done. When the iron works at Ringwood were built, this was the accepted method of making good iron.

The most important use found for cast iron, when it was first developed, was in the casting of cannon which, up to that time, had been made of bronze, the great cost of which reduced the number of cannon which could be made. With the advent of cast iron, armaments vastly increased. Soon cast iron shot were made, and at a very early period, hollow shells, which were filled with gunpowder to explode them. The first petition to the Crown for a Royal Patent to make shells recites that "This cannon ball, which contains powder, will explode when it reaches the enemy and will either kill him or spoil him."

After the development of the iron furnace to the point where cast iron was made, the improvements for about four hundred years were in increasing the size of the furnace slightly and building better bellows with more power. Charcoal was the universal fuel, until Abraham Darby first made and used coke at Colbrookdale, England, in 1735, but still the furnaces remained substantially of the same type—using cold air for the blast. It seems strange to us now that the use of a hot blast could have been delayed so long, but the reason for this is simple to understand. Ironmasters noticed that they produced more iron in winter than in summer, and quite naturally attributed this to the colder air in winter. They could not know that the difference was due to the moisture in the air, which is less in winter than in summer, because they had no means of measuring moisture in air. The lack of knowledge of this simple fact delayed the production of increased quantities of iron, at lower cost, for hundreds of years. It was not until 1828 that hot blast was first used in iron making on the Clyde, in Scotland. We see from this, that the furnace at Ringwood belonged to the period of the cold blast until almost the end of its active operation. Hot blasts were used there only shortly before the old furnace was finally blown out.

In the early hot air blast furnaces, the air was heated by being passed through cast iron pipes heated on the outside by a separate fire. Soon, however, it was found more economical to use the hot gasses escaping from the top of the furnace to do this heating. The final improvement, invented by Edward Cooper, which is in use today, was to carry the hot furnace gasses into a brick room filled with firebrick open checker work, which the hot burning furnace gasses heated very hot. When heated sufficiently, the furnace gasses were shifted to another similar room, which they heated, and air was blown through the first room over the hot bricks and into the furnace. When the bricks began to cool, the air was again shifted to the other room where the bricks had again been heated. In this way, the hot blast entering the furnace can be kept as hot as it can be used. This type of hot blast furnace was never used at Ringwood, but was adopted at the Hewitt furnace on the Long Pond Stream—now called the Greenwood Lake River—by Cooper and Hewitt. The Ringwood furnace was in final operation just at the transition period from the older methods of making iron to the newer ones which, with many modifications, are in use today.

The fuel for all the old iron furnaces was charcoal, until 1735, and even after that date the use of coke was slow in becoming popular, so at the time Ringwood was first started as an iron making center, charcoal was one of the materials most eagerly sought for iron manufacture. Charcoal furnaces had been in use so long in England, and there were so many of them, that wood for charcoal was becoming scarce, so the news of the discovery of rich iron ores in America, which were located in regions covered with virgin forest, naturally attracted great attention. Wood had become so scarce in Sussex, England, even in the reign of Queen Elizabeth, that she issued an order forbidding the cutting of any more wood for iron manufacture in the Weald of Sussex. It used to require about 10,000 acres of woodland to continually supply the charcoal for a blast furnace of that period producing 25 tons of iron a week. Gradually coke displaced charcoal as the fuel for iron manufacture, but there were still three charcoal iron furnaces operating in England in 1865.

Up to this point in the story I have not mentioned the impurities in the iron ore which may injure the quality of the finished iron. The lime and silca can be largely elminated and controlled by regulating the slag, which is formed during the melting of the iron. Limestone is added during the melting to make this slag more fluid and to help remove the impurities of the ore. Nearly all ores contain small amounts of phosphorus and sulphur. The sulphur is partly burned and goes off with the furnace gasses, while much of the balance can be removed in the slag, but the phosphorus nearly all goes into the iron in the common blast furnace practice.

In ancient times the chemistry of iron and the effects of impurities on the quality of the iron were, of course, unknown, so that only in a few places where iron ore was especially pure, was really good iron made. These localities acquired a great reputation, such as Damascus, or Toledo, or Sweden. While the ironmasters of those places had acquired much skill in the making of iron, the high quality of their product was due more to the purity of their materials than to their skillful use of them.

When sulphur is present in iron in too large an amount, the iron becomes what is known as red short, meaning, that is, brittle when worked hot, so that it cannot be forged well. When phosphorus is present in too large amounts, the iron becomes cold short, a term signifying that it is brittle when bent or worked cold. This is a most serious defect in iron and makes it worthless for many purposes. The amounts of these impurities which can exist in iron without injury, are extremely small. Sulphur is injurious if it is more than .2 per cent of the iron, and it must not be over .02 per cent if the iron is to be of first class quality. .3 per cent phosphorus hardens iron, but does not make it really cold short, but more than this will make it brittle. For good iron the phosphorus should not be more than .1 per cent and for really fine iron or steel it should be under .02 per cent.

There are, of course, other impurities encountered in ores, such as silicon, arsenic, and copper and titanium, but these are not so common and can often be removed in the slag.

The ores of the Ringwood region are very uneven in their content of impurities and there are wide variations in different portions of the same mine. The phosphorus runs all the way from 1.5 per cent to a low of .2 per cent in some places. In the early days they were constantly opening new mines in the hope of finding ores which would make better iron. Some of the ore bodies proved to be very good, particularly near the surface of the ground where the impurities had been somewhat leached out by weather and water. The phosphorus was always higher near the walls of a vein than in the center of the mass of ore. This constant variation in the quality of the ore made great difficulties for the early iron masters who did not know the chemistry of the process, and had to try out each source of ore by making it into iron. The early iron made in these iron works was never reliable over any long period, but was excellent at times. We now know the reasons for their troubles.

The difference between wrought iron, cast iron and steel consists in the amount of combined carbon they contain. Wrought iron is nearly pure iron and contains less than .2 per cent carbon, while the best wrought iron has less than .1 per cent carbon. Cast iron contains usually about 3½ per cent combined carbon, but may have as much as 4 per cent, and even more, present as graphite, which is not combined with the iron. Steel is iron which contains from .3 per cent to 1.5 per cent carbon. When it has .5 per cent carbon it is called mild steel. When it has approximately 1 per cent to 1.5 per cent it is called tool steel, and there are all varieties of carbon content for different purposes. Steel from .5 per cent carbon up, will take a temper by suitable heat treatment, whereas wrought iron will not be hardened by heating and chilling. It is the quality imparted to steel by heat treatments which give it its very great value in engineering and tool work.

The processes for making iron at Ringwood were of two kinds. The first was the forge in which the ore was heated with charcoal until the charcoal had removed the oxygen of the ore so that it was reduced to metallic iron without melting the metal. It was refined by hammering and reheating. The second method was the blast furnace with cold blast driven by a water wheel. The furnace was about 25 feet high and eight feet diameter at the largest part inside. It made, when working well, about twenty-five tons of iron a week.

Hasenclever tells, in his book, that he had in his employ at Ringwood a number of German workmen skilled in the making of steel from iron, and that he instructed them to make some steel, which he took to England and had tested there, as well as in Germany. The steel was found to be of good quality. In searching for the date of the earliest manufacture of steel in America, I found that it was first made in 1738, by Higby, in Simsbury, Connecticut. I also found another reference to steel having been made in Massachusetts in 1750, but the location was not given. These are the only two references to steel making in America I have been able to find, which were earlier than that made for Hasenclever at Ringwood. This places Ringwood as among the first three places where steel was made in this country.

CHAPTER III

ECONOMIC CONDITIONS AT RINGWOOD

IN ORDER to give you some idea of the economic conditions in the early days of Ringwood and why it was necessary for Peter Hasenclever to develop the place in the way he did, we will have to go back to the original condition of the country when first settled.

The primeval forest covering this whole region was composed of very much larger trees than we now see in any numbers at the present time. Oaks three, four or even five feet in diameter were the ordinary trees wherever the soil was sufficient to grow them. Shellbark hickories abounded, whose first limbs were as much as fifty feet from the ground and the trunks two feet, and even up to three feet, in diameter. Chestnuts were of enormous size.

One of the old forest chestnut trees which I measured a number of times remained in the garden of the Miller place. The trunk was nineteen feet, six inches in circumference five feet above the ground, and the limbs extended 120 feet from side to side. This tree was killed only a few years ago by the blight. There were many white oaks up to five feet in diameter in the valley between our place and Midvale. A number of these were destroyed in making the reservoir lake.

When I was a young man I was once hunting on the top of Greenwood Mountain and came across a valley between two cliffs, which evidently had been such a hard place to get wood that none had ever been cut there, and the original forest was untouched. I saw a large number of the large hickories I mentioned above, which must have been over fifty feet to the first branches. I do not know if this wood has yet been cut. If not, it must be almost the only original forest in New Jersey.

Hardwoods leave about four per cent ash when they are burned. A considerable part of this ash is composed of potash. The cutting of a heavy crop of hardwood timber removes from the soil a very large amount of potash, on which future trees are dependent for their proper growth. All the Ringwood country has been cut off at least twice, and much of it three or four times. The potash in the soil of this area was only derived from the weathering of the feldspar in the granite and it never was very plentiful in the topsoil. The cutting of several crops of hardwood removed nearly all of it from the soil available to the roots of the trees. For this reason, hardwood trees now grow only very slowly in the Ringwood country and will never again become very large, sound trees. Soft woods, such as pine, hemlock and cedar, contain very small amounts of potash and, therefore, make excellent growth in this region.

At a line corner on the hill at my Boardville farm there was a surveyor's corner marked on the deed of 1808 as being a white oak twelve inches in diameter. When we found this corner in 1925 this tree was not over sixteen inches in diameter and had only made four inches increase in diameter in 117 years. This land was near the old forge and had, of course, been cut off twice before the line tree grew up. Two crops of full grown hardwood timber are all that will grow well on the soils of this region. The present woods are making a pitifully slow growth.

The original rapid industrial development of this locality was due equally to the abundant rich ore close to the surface, and the vast forests. The farming land could only be used after the woods had been cut and the stumps and roots removed. This was a very slow process, taking many years to complete.

When Peter Hasenclever bought the original forge and furnace from the Ogdens, he at once began the intensive development of the place as a complete self-sustaining unit, because he realized that success could only be attained in a location so far from supplies if everything were made on the property.

All the haulage of the ore to the furnace, the wood to the charcoal pits, and the charcoal to the furnace, as well as the transportation of the finished iron to market, was done by wagon in summer, and by sleigh in winter. All these vehicles had to be made on the place out of local materials, and the building of wagons survived to my day. Our farm wagons were always made on the place. The wheelwright, a descendant of one of the Germans brought over by Hasenclever, was a man called Ocaboc (Ocabach, in German). He taught me the trade of wagon making by hand, just as it had always been done on the place. Elm wood was always used for the hubs, because it did not split when the spokes were driven in. Hickory was used for the spokes, as well as for the fellies (the outside wooden rim of the wheel). When the wood part of the wheel was completed, the tire had to be put on. This was a skilled job for the blacksmith, Sammy Morgan, who was a colored man, whose grandfather had shod Washington's horse at the old blacksmith shop. He was, of course, descended from one of the original slaves who worked on the place. Slavery was customary in New Jersey until the middle of the Eighteenth Century.

The blacksmith had a round cast-iron plate, set level in the ground outside the blacksmith shop, which had probably been there since the original construction of the building, and was cast at the old furnace. It had a twelve inch hole in the center to let the hub pass down so that the fellie could rest on the iron plate.

The first operation was to measure the length of the outside rim of the wooden wheel. This the blacksmith always did by using a very old iron wheel about six inches in diameter which was mounted in a forked handle. He would mark the side of the iron measuring wheel with chalk and place a similar mark on the wooden fellie. Adjusting these two marks to meet each other, he would run the iron wheel around the outside of the fellie counting the number of revolutions it made marking the iron wheel exactly when it came to the chalk mark on the fellie. Then he would mark off with his iron wheel the same distance on the flat iron he was going to use for the tire. Sammy Morgan always allowed about an inch shorter in the iron rim than the distance around the fellie so that when it was shrunk on it would hold the wheel tight. He used to allow about two inches of iron for the weld. When the iron was measured he would roll it into a circle and weld the ends securely. Then they would place the tire on the ground and build a fire all around and over it to heat it evenly quite hot. When ready, the heated and expanded tire was lifted by two men, with tongs, and placed over the fellie resting on the iron plate. When it was properly adjusted he would cool the iron by dashing water on it, which also put out any fire on the wooden fellie. The shrinkage of the tire held the wheel firmly in position and the tire was finally bolted through the fellie so it could not come off. This seems like a crude and lengthy process, but it was the only means available in those times. I watched this operation often, always expecting that Sammy Morgan would make a mistake by his crude methods of measuring, but he never did. He was remarkably skillful and never got a tire wrong.

The axles were always made of wood and never of iron. Wheelwrights used hickory, or the best second growth white ash for axles and always said that they stood hard work much better than the wrought iron axles of those days. The ends of the wooden axles were covered with a thin iron casting called a "skein" to take the wear and the inside of the hubs were also often fitted with an iron bushing, but many of the wagons ran on the wood of the hub itself until it was worn too much, and then the bushing was put in place. Plenty of axle grease was always used.

All the wagons were ironed with wrought iron made in the blacksmith shop by hand. The blacksmiths fitted these parts with remarkable speed and skill. It is readily seen why they needed so many blacksmith shops at Ringwood for the wagon and tool work, as well as for horse shoeing.

Charcoal burning was a trade in itself, requiring some skill to do it successfully. They had abandoned the use of charcoal in the furnaces long before my time, the blacksmiths always used charcoal if they could get it for their iron work, because they said it made a better wrought iron. This, no doubt, was so, because charcoal contains no sulphur, which is present in all coal, and may make iron red short. It was many years before the blacksmiths at Ringwood would use coal, and then only because they could no longer get charcoal.

I saw a number of charcoal pits made and burned when I was a small boy, and a description of this process may be of interest to those who have never seen this done. Charcoal burning in pits is no longer practiced anywhere in that region, as far as I know. Why it is called a charcoal pit, I do not know, because there is no pit dug—the burning takes place on flat ground. First the burner selected a suitable place for his pit, which must be located near a wood road so that the wood may be brought in and the coal carted away. It must be at a place where he can get sod, if possible, and if not, enough dirt to cover the pit. When he has found a suitable place the ground is cleared of all brush and stumps, and made level. You will find any number of these round flat places in the woods, now covered with grass, because trees never seem to grow again in an old charcoal bottom. The wood is cut and piled up on the ground in a pattern they had found best for the burning. I don't remember just how they piled it, but they said it must be done in a certain way to work well.

The pits I saw made were from 16 to 20 feet in diameter, and the wood piled about six to eight feet high. This is as high as they could throw the dirt up with a shovel. When the wood was all ranked up they would then put a ring of dirt about the base of the woodpile, and in this they would set peeled sticks about three feet long with their small ends pointing inward, and the outer ends extending beyond the dirt. These sticks were set about four feet apart. They were from an inch to an inch and a half in diameter. The withdrawal of these sticks provided the air draft holes for the fire within, and enabled the burner to regulate the rate of combustion. This was done carefully, because if the fire was too active the gasses from the wood would come out too rapidly and blow up the pit and scatter the burning wood about and cause a fire in the woods.

After the bottom of the pile was arranged, the burner then covered the whole pile of wood with about two feet of earth or sod, leaving a hole at the top about two and a half inches in diameter to let out gasses and smoke. The fire was lighted from several small holes left in the base of the pile of dirt and which were closed after the fire had started. The burning of a pit takes from a week to ten days, and when it is complete, the fire was smothered by closing all the air inlets and later the hole at the top. It took several days for the pit to cool off and became thoroughly extinguished. When cold, the dirt was stripped off and the charcoal carted away. A single pit made many wagon loads of charcoal.

In our easy days of physical work, it is hard for us to realize the immense amount of hand labor involved in such a process in those times. All wood cutting was done with axes. They used to work from ten to twelve hours a day and get a dollar a day for their work.

Mining was an equally strenuous job, as it was all done by hand, except the actual blasting, which was done with black powder. Dynamite did not come into use until the early eighties. The drilling was all done by hand, the drills being driven into the ore, or rock, by hand hammers. The drills were hexagonal steel rods, about an inch in diameter, which were sharpened and tempered at the end in the blacksmith shop. They were never ground. The sharpening of drill points required a special skill because they must be hard enough to drill the rock, but also tough so that they would not chip on the edges. In sharpening the drill, the blacksmith forged the sharp edges he wanted at the end and then heated the drill red hot and plunged the drill vertically into the ground, which he had moistened to just the right dampness to give the temper he wanted. Any suggestion of a better tempering method was laughed at. They said this way was the best and gave the best and toughest drills.

It took three men to drill a hole. One held the drill and put water in the hole and kept the hole bailed out of dirt. The other two struck with the hammers which weighed about six pounds each. They would strike alternately, and never hit each other's hammers, or the hands of the man holding the drill. This is an astonishing performance when the hole is vertical, but when it is horizontal, or at any angle in a breast of ore, it is simply marvelous that they could do it all day long without accident.

When the hole was deep enough, it was filled with black powder to within two feet of the top, and the fuse placed in the powder and the hole tamped shut with clay. The blasts of the mine were always fired at noon and six o'clock, when the shifts changed, thus allowing some time for the black powder smoke to disappear before the men started to work. As the blasts went off, the miners always counted the shocks to see if all had gone off. Sometimes one would fail to fire, and after waiting an hour or so one man would go down and uncover the dead hole. There might be some danger in this operation as the fuse might be working still, and it might go off, but I never heard of an accident from this cause. We could always hear the blasts all through the Ringwood valley at noon, and many a day I heard them when I was fishing the brook down the valley and knew I had to get home to lunch or be scolded for being late.

When the blasts had gone off, the miners went again into the mine and the loosened ore was broken up by hammers and picks and loaded into the buckets and hoisted to the surface and loaded on the cars.

When I was a small boy, some of the mine-hoisting was still being done by horse-winches, which were a device where a horse walked in a circle about sixty feet in diameter, pulling a horizontal beam which was fastened to a vertical post guyed upright by iron cables. At the bottom of this post was a wooden drum about three feet in diameter, about which was wound the rope which hoisted the mine-bucket. The horse was trained so that he would start going round and round when a whistle blew, and stop when it blew again. His pull on the beam hoisted the bucket in the mine. This method was always used when they opened some new shaft, until they saw whether it would pay to put in a steam engine. This was the way all the ore came out of the mines in old times, before good, simple portable steam engines were available.

Some people may not know that it was the lifting of coal from mine-shafts by horse-power, in this way, which furnished James Watt, the inventor of the modern steam engine, with his unit of power. There was no power unit in his time, so he went to a neighboring mine and weighed the bucket and load and measured the distance the weight was lifted in a certain time by the horse. He found that the average mine-horse could lift 33,000 pounds one foot in one minute, in this way periodically through the day, when called upon, and could continue to do this much work daily. His unit is not the maximum power a horse can exert, but what he can do daily in periodical work. On a spurt a horse can do several times this much work. A man was found to be able to do about one-twelfth as much as a horse.

Two of these old mine-horses were pastured on the meadow in front of the house one season, and they would often begin to go round and round when the noon whistle blew, until they found they were not attached to anything.

Leather tanning was another industry practiced at Ringwood in the earlier period. Leather was much needed, not only for harness, but also for the heavy leather aprons used by the blacksmiths and the men about the forges and furnaces. There were old tanning vats down by the river when I was a boy, which had only been abandoned for a few years. There was always a resident shoemaker and harness-maker at Ringwood all during my boyhood.

Lime was needed for building and limestone for the flux in the furnace. A small outcrop of limestone existed at Boardville, located on my farm. This had been worked for over one hundred years until better lime could be had from other locations. There was also another limestone outcrop within the present limits of Tuxedo Park.

Clay was dug in the meadows, although there were no large beds of it. No doubt, in earlier times they baked some rough pottery from it, as we did as children, but its main use was in tamping the drill holes for blasting and stopping the outlet hole for the iron at the bottom of the blast furnace.

When a furnace is started the vent hole at the bottom is plugged with clay, which bakes hard with the heat and holds the liquid iron back. When enough iron has accumulated on the hearth to make a casting run, two men use a long pointed heavy iron bar and work away at the hard baked clay until the iron is reached and it runs out down the sow groove in the casting sand in the casting house where it is led to the pig moulds to cool.

When we went out riding, as children, in the afternoon, we always tried to be on the hill opposite Stirling furnace, which was then in blast, in time to see the casting made. The two men would pick at the clay stopper with the bar, often having a hard time to get the vent open. When they finally did, the molten iron would rush down the groove where the casters would lead it into each line of pig moulds successively and stop off the red hot stream with sand, and lead it to the next set of pig moulds, until all the iron in the furnace was run out. The molten metal lit up the black casting house with a red glow and the workmen looked like red devils playing with the molten metal. It was like our games with mud and water and boats, but with red hot iron. We often wished that the Ringwood furnace was still in blast so that we could see this game at home. Of course, this same thing had taken place at the Ringwood furnace for over one hundred years.

When the old wooden wagons used to break down by cracking a pole or a whiffle-tree, the drivers used to get their wagon home by tying up the broken part with the bark off a small tree they called leather wood. This bark is almost as strong and flexible as leather, and made an excellent material for making a splice of broken wood. When the bark dries, it hardens and shrinks and really makes a very durable job. I do not suppose anyone would now recognize leather wood if he saw it in the woods. The white settlers learned this trick from the Indians.

Making of barrel-hoops was quite an industry at one time in the Ringwood region. Barrel hoops were made by splitting up young hickory saplings about ten feet long. They were bent around a barrel, or hogshead, and fastened by a very ingenous method of notching the hoop. Later on, the poles for the barrel-hoops were shipped away by train. Millions of them were cut at Ringwood.

Sugar maples grew well in this region, and the early settlers made all the sugar they could. In my early years they still used to make quite a lot of sugar and we always tried to come up in February, or March, to the sugaring off. The sap gathered from the trees in buckets was evaporated in a large open pan with a fire under it until the syrup became strong enough so that it could make sugar when cooled. We used to try the syrup on snow to see when it would be ready, and the first one to get solid sugar would always let out a whoop of joy. There is no taste like fresh maple sugar cooled on the snow. Those who have never made maple sugar in winter have missed something. (*Note*—If anyone should try to collect maple sap from the tree to make sugar he should be careful not to use a galvanized pail because the malic acid in the sap will dissolve the zinc from the galvanized surface and form Mallate of Zinc which may prove poisonous in the final sugar.)

Of course, sheep were raised and their wool spun and woven for clothes. Flax was also grown in early times. In the old garret at Ringwood were several spinning wheels and I was taught by an old relative of my mother's, Mrs. Porter, to both spin and weave. There is a lot of skill in spinning and I never got to make really fine even thread, but I did make quite a lot of it and learned to weave it.

The farms in the valley raised most of the grain and the local population used it for food. The grist mill built by Hasenclever operated until the middle of the last century. The old grinding stones were on the grounds when I was young and they may yet be there.

With all these local industries going full blast, in early times Ringwood was probably the most self-sufficient community in all America. Not only was the food raised for the local population and prepared for use, but all the means of transportation were produced on the place—animals, wagons and harness. All the iron and steel was made for local use, together with whatever cast iron castings were required, made direct from the molten iron from the furnace. Very little in the way of goods came in from the outside. It was an almost completely self-contained economy, perhaps the most complete ever to exist in this country. This, of course, broke down when transportation became easier and outside goods could be easily and cheaply obtained. When I was young, this process was just taking place and had not yet been entirely completed. I have always felt that although such a self-contained economic group may not have been very efficient, as far as labor is concerned, yet it had a great deal to recommend it in the association of all these various handicraft trades in close connection and dependent on each other, without the intervention of the medium of money. It was largely trading and barter of work and home made goods. It seems to me that people had more respect for each other when they were all inter-dependent and all knew one another intimately and respected each other for what they could do.

CHAPTER IV

CHANGE FROM AN IRON WORKS TO A COUNTRY ESTATE

THE original Manor house at Ringwood, built by the Ogdens about 1745, was not located exactly on the site of the present house. It was in front of the present site, with its back wall about even with the row of large trees which run along the top of the sloping bank south of the present house. It was directly opposite the front door of the present house.

In an advertisement for the sale of Ringwood, issued by Robert Erskine, the house is described as 92 feet long and 30 feet wide. It ran east and west. In very dry seasons the line of the old back wall can be seen in the grass which becomes more burned up and yellow where the old wall was. Evidently it is not far below the sod.

The house has been described in the journals of visitors as poorly built and inconvenient. When my father moved to Ringwood, in 1857, there were still a number of old people who remembered the original house, and he had an artist paint a picture of it from their descriptions. This picture is still hanging in the upper hall of the present house.

As nearly as can be ascertained, the original house was either pulled down or burned, about 1807. I rather think it was burned, because a piece of the furniture sold from it—the tall clock—was purchased by a man in Pequannock, whose daughter sold it again to my father. This clock case is badly scorched. It is now in the present house.

Martin John Ryerson, who purchased the property in 1807 built his own new house, which was completed about 1810. It was of the Colonial style of that period, with two rooms and hall on the ground floor, with a wing for kitchens where the big piazza now stands. The kitchen cellar is still under the piazza. My mother had this building opened up to make a piazza. The old part of the house is still much as it was built, except the two bookcase alcoves, which were originally closets. My mother had the walls of these removed when I was a boy. The old Ryerson part of the house ended at the hall.

Mr. Edmund Miller was in partnership with my father in the iron business; in 1864 he wanted to spend the summer with his family at Ringwood. As the Millers had five children, and my mother at that time had four, more room had to be provided, so the large central part of the present house was built during the Fall of 1863 and the winter of 1864, so as to be ready for the summer of 1864. The large room above the north parlor was used as the nursery.

The Millers lived for three years with our family during the summer, while Mr. Miller was building his own house on the hill south and east of the south gate to the place. This is now owned by the Catholic Church. My mother wanted to give it to me, but I did not like the house, or its arrangements, or the great expense which would be entailed in keeping up the grounds.

The upstairs part of the central portion of the Ringwood house is still very much as it was originally arranged. The lower part has been altered considerably, especially in the making of the big hall and the staircase at the end of the hall. I do not know how the rooms downstairs were originally arranged.

The "doing over" of the Hall took place about 1878, under the direction of an architect called Derrick, who had been the designer of the New York Post Office, which used to stand opposite the N. Y. City Hall. Evidenly my father approved of his work, and he lived at Paterson, nearby. His design of the woodwork is most characteristic of the most fully developed period of "Paterson architecture" and should be preserved, as showing what could be done at that time. I know of nothing like it anywhere. All the woodwork was made in our own carpenter shop at Ringwood, by local carpenters, and I watched the work all summer and helped with it. The cherry columns, I remember, came from West Virginia, as well as the cherry flooring. The oak for the stair-treads was cut and sawed at Ringwood.

It was at this same time that my mother enlarged the house by the extensions to the east, by moving up buildings which were on the place. I have no doubt that some of them were the original buildings built by Peter Hasenclever. The frames of all these buildings are made of hewn logs and not sawed timber. My mother would have the buildings measured and the foundation walls built, and then have the buildings moved into place with rollers and ox and horse teams. The upper floor levels did not match, of course, as can be seen in the levels upstairs. The roofs were most difficult to join, and the valleys between the roofs almost impossible to make tight against water.

She kept on adding buildings until she came to the road, and then stopped. If there had been no road she might have gone farther, as there were still plenty more buildings to move.

I remember the first building added to the large part of the house was the manager's house, which used to stand just east of the big turn-around ring. Another building was the old store, which used to be west of the

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present lawn on the road to the graveyard near the big walnut tree. A third building had been used as a chicken house for many years. It was a good frame house and solid. The last building, near the road, had been used as a two-family house for many years.

Of course, it would have been much easier and cheaper to build new extensions to the house, but my mother never could bear to waste anything, and had to use these old buildings because they were there, and she wanted to get rid of them and have them out of sight. She had no definite plans for using the ground floor, but arranged and re-arranged the rooms several times.

The cellar was excavated after the buildings had been set in place. At first she did not feel that a cellar was necessary, but one late Fall spent there, after the house was completed, convinced her that a cellar was needed, so it was excavated by hand, with wheelbarrows.

When the whole house was finally all pieced together, the question of painting it came up, as the walls of the various buildings were finished in all kinds of ways, with shingles and clapboards of all sizes. Our old family painter, Mr. Snell, estimated it would cost $12,000 to paint the house and it would have to be re-done every few years. My brother, Cooper, suggested that the best thing to do would be to put wire lath all over the outside of the house and cover this with cement. This was finally done, and this was the first house in this country finished in this way. It has been perfectly durable for over fifty years, with almost no repairs. This plastering over the old house accounts for some of the queer architectural features of the outside of the house. No one would ever plan to build such a house. It just grew, like Topsy.

The two rooms due north of the big hall were built new and were not old houses moved up. The one farthest north was set out from the house so that my father's bedroom would be less noisy, as he was a very bad sleeper. The room below his bedroom was never used for anything but storage until after his death. The room nearer the hall was our schoolroom, and later, Miss Nellie's workroom and office.

The porte cochere covering the driveway was planned by my mother just before a trip to Europe with my father. The architect asked her if she was not afraid to do such extensive building without consulting Mr. Hewitt. She said she always got scolded when she planned anything new, and would get scolded when this was done. She said she preferred one scolding to two, as Mr. Hewitt, after a little while, always thought he had planned the thing anyway. Sure enough, he was soon telling guests how he had made this fine new addition. My mother understood him perfectly, and they got on wonderfully all their lives.

There is an old pear tree right east of the porte cochere, which was planted by Peter Cooper from a tree derived from Peter Stuyvesant's farm in New York. It had poor pears to eat, but there were always a few on every year. One of the Stuyvesant pear tree stumps used to be in the sidewalk of Third Avenue, near 17th Street, in New York, when I was a boy.

When my mother first came to Ringwood to live, it must have been a most unsightly place for a summer home. The old furnace had only been out of blast for nine years and the whole place was littered with the remains of an iron business, which had been in operation for over one hundred years. Slag heaps and cinder heaps and charcoal were everywhere, and buildings set all over the place. She often told me that she became discouraged at times because it took more than twenty-five years to get the place cleaned up so that it looked like a home and not a place of business.

The building across the first pond, which now looks like a Swiss chalet, was either the stamping mill or the casting house of the old furnace. It was made over into a dairy to look like a Swiss house after a trip to Switzerland. In the south end of the building my father constructed a small swimming pool which was arranged with hydropathic appliances. The water was derived from the raceway which used to feed the water-wheel of the old furnace, and which then ran a small water-wheel, which pumped the water up for the house. The pool was about sixteen feet long, ten feet wide, and about three feet deep and made of wooden planks. About five feet above the water was a trough, thirty inches wide and ten feet long, into which the water from the raceway could be run. When the full flow was let in it was so swift that when one sat in the trough the water would rush up over one's head, and if one let go holding to the side, the bather would be shot down into the pool below.

We had lots of fun with strangers with the trough, getting them to sit in it and then turning on the water full and shooting them down into the pool. We used to shoot ourselves down head first.

Above the pool was an eight inch pipe, controlled with a valve, which forced down an immense stream of water. The pressure was so great one could hardly stand up under it. There was also a similar pipe coming up through the floor of the pool so that one could sit on the stream and balance oneself on the stream of water. Another pipe shot out from the side, and the water gushing there was so swift that one could hardly stand up against it. When the bathing pool was used it took the full capacity of the raceway, and if used for a half hour it would lower the water in the millpond above. As this pool was indoors we never wore any bathing things and had grand times there.

My father always used it when he came from town.

None of the ponds in front of the house were in existence when the family first came to live at Ringwood. The water from the furnace waterwheel ran into a brook down through the meadows to the main stream. The first round pond was made for the children to play around and swim in. A second small one was made so as to lead the water behind the blacksmith shop so that a brook could be made to run in sight of the house. This has now been filled in. Later, the larger lower pond was made, but the original pond was not as large as the present one it only extended in a line with the wall which extends along the brook past the large elm tree.

The large pond, which is now before the house, was only made about 1895. My mother would not consent to it earlier, because it flooded so much fine meadow land which was needed to grow the hay for the cattle. This pond used to be the best pickerel pond I ever saw. We could always catch any number of pickerel in it, from two to four pounds—most of them were about three pounds. We used to catch the same fish any number of times and throw him back. I remember catching one fish seventeen times in one day. He would always take the bait when it came near him, but finally his mouth got all worn out. The larger pond very greatly improved the appearance of the whole place.

The main road to the mines, from the furnace, ran past the house below the sloping bank. The first building along this road was the old country store, which had been the center of interest in the community for over a hundred years. There were two more houses near the two large oak trees, and one or two buildings where the road turns toward the graveyard. This spot was called the Magazine, where powder for the mines had been kept, and where the Army stores were lodged at the time of the Revolution. When this ground was plowed one season we found there a large copper penny, which is known as the "Franklin penny", with a device on its face of thirteen links with "Mind Your Business" in the center. I do not know what has become of this rare find. At the same time we found a large number of Indian arrowheads. As these are not often discovered in this region, it seemed to indicate that some fight must have occurred here in the remote past.

There used to be two large apple trees in this Magazine lot, one of which was much the largest apple tree I have ever seen. It measured seventeen feet around, four feet from the ground. Every effort was made to save this tree by tree surgery, but it died probably of old age. It must have been planted by the earliest settlers.

Along the road by the graveyard there used to be a whole row of workmen's wooden houses and some log houses, which my mother gradually had cleared away. There were also several more buildings in the area of the barns which have now been torn down and removed.

Just behind the main house was the original Ryerson garden, in which there were six large apple trees. The tree farthest west had an iron ring in it, which tradition said was there to mark the site of a buried treasure. There were also iron rings in some of the limbs, which were there for no known purpose. Twice, when we were children, men came at night on the dark of the moon and dug enormous holes about eight feet deep and ten feet in diameter under this apple tree, hunting for treasure. We never found out who they were or whether they unearthed anything.

No one knew how any treasure could be there, but I have since found that when the Revolution began there was great fear of raiding and robbery by Tory raiders, and Ringwood was considered the safest place in the whole countryside. Many of the wealthier people between Ringwood and Newark got their valuables together and brought them to Ringwood because of the military protection. Years ago there was an old lady who lived in Butler, a Mrs. Doland, who reached the age of 96. She had worked as a small girl at the Mandeville Inn, on Pompton Plains. Many parties came through that road and stopped at the Inn. They were bound for Ringwood and had heavy bags with them. The proprietress told her that these heavy bundles held silver, which they expected to conceal at Ringwood until after the war. Some of this treasure may not have been dug up, and perhaps some of the descendents of those people were trying to recover it. It may be there yet, who knows?

My mother moved the vegetable garden, step by step and year after year, back to its final position against the hill, making the area around the house into a formal garden. Neither she, nor my sisters, ever had any final plan for this garden, but changed it many times after their various trips to Europe.

There used to be a large greenhouse with an interesting history along the wall at the North of the formal garden. The progenitors of the hothouse grapes there were brought to Spain by the Moors from Persia. Later, when Ferdinand and Isabella captured Grenada, they kept those grapes as a royal prerogative, and no cuttings were ever permitted to be made.

Sir William Cunard, who was one of the great grape culturists of England, established the Cunard line to Spain, so the then King, as a mark of special recognition, presented him with some cuttings of these grapes.

Sir William was a great friend of Mr. Hewitt, my father, and many years later, when Mrs. Hewitt was sailing from England, she found a package of cuttings from these vines in her cabin as a present from Sir William, and from these the vines were propagated. Our vines were moved to the new greenhouse when it was built, and were still bearing wonderful fruit as long as my mother lived.

The log cabin at the side of the garden was built for a playhouse for my sister Nellie and me. Later, we used it as a sort of tea house, or picnic place. There was also a very ancient mechanical spit, which was run by a treadmill, for a small Dachshund. The mechanism was so arranged that the meat, or bird, was slowly turned in front of the open fire. This device was given to Nellie by Dr. Green, who got it from an old castle near Pau, in southern France. We often used to cook chickens, or turkey, or a roast in this way, and have a grand feast when we had a big houseparty. The Dachshund always looked cute doing his job. I suppose this spit has disappeared by now.

My mother wanted to finish the place like English country places are treated, with a stone wall, with stone gateposts along the main road. The stones for the big gateposts came from the granite quarry at Ramapo. The wall was begun at the gate and first extended South. Mrs. Hewitt wanted a solid wall, where the top stones would not be pushed off when someone climbed on the wall, so she insisted that the large stones be placed on top of the wall and not at the bottom, as is usual. The men, of course, did not like to set the big stones up high, as it was hard work, and they would not do it unless she was there to see to it. Whenever she came down in her pony carriage to watch the building the men put big stones on top, but just as soon as she departed they would no longer do it, as they knew very well she would not make them re-build any wall already up, as she did not like to waste any labor. You can see today, if you walk along the wall, every place where she was watching the men and made them put the big stones at the top of the wall. Sometimes she would come down twice a day and then you will see the big stones placed closer together. It took about two years to build this wall all around, as all the big stones were dug out of the fields to improve the farm. My mother certainly left a permanent mark of her inspection.

When I was a boy nearly all the farm animals were kept at the barns near the stable, but later the barns below were built, I suppose, in order to have less flies near the house. They had mostly Alderney cattle for milk, but later some Swiss Simmenthal cattle were secured, because they were believed to be immune to tuberculosis. However, although they made wonderful oxen, they never gave enough milk to pay for their keep. One of the bulls, when killed, weighed over four thousand pounds. He was such an extraordinary animal that they had the hide tanned and mounted for a rug. It was twelve feet long by ten feet wide. I still have this rug in my sitting room at my house in the Catskills.

The maple trees bordering the road on each side down to the lower barns were planted by Mrs. Hewitt, my mother, in 1885. They have made a poor growth, due to the small amount of potash left in this soil.

The double row of large trees in front of the Manor house were planted by Mrs. Jacob Ryerson at the conclusion of the peace at the end of the war of 1812 by the Treaty of Ghent. There were thirteen, originally, for the States but some have died. When I was a small boy, the two large elms in front of the house were the same size in the butt, but Mrs. Hewitt had a faucet for a hose placed beside the West tree. This faucet dripped a little water and this has caused the greater growth in the tree to the west.

The iron work across the path in front of the house was secured by Mr. Hewitt when it was removed from Bowling Green, where it had been in front of the old British Government house. It must have been forged early in the Eighteenth Century. The iron lamps were near the George II statue, which was pulled down by the mob in the Revolution.

The hammer-head and forge-anvil which are at the edge of the bank, were duplicates of the ones which were used at Ringwood, and are of the same date. My father wanted to find the old hammer and anvil, so I told him these were in the bottom of the brook over the Hewitt furnace, as I had seen them in the gravel when I was trout fishing. He sent over and had them moved to Ringwood. The forge at Hewitt was built at the same time as the Ringwood forge. It was with a hammer and anvil of this kind that the great chain which went across the Hudson River at West Point was forged largely at Stirling—some of it was made at Ringwood.

The large siege mortar, with its carriage which stands at the edge of the bank south of the Manor House, was one of those used during the Civil War, during the campaign for clearing the Mississippi River. It has an interesting history.

During the campaign to open the Mississippi River, General Grant was held up by the Confederates at Fort Donelson, at the mouth of the Cumberland River. He felt that the fort could only be reduced by heavy mortars. The mortars themselves were available, but Grant had no suitable mounts for them.

The head of the United States Government arsenals stated that it would take a number of months to make these mounts at the arsenals. So President Lincoln, who knew the urgency of the demand, wrote Cooper and Hewitt—at that time the largest iron firm in the country,—to see if they could get the mounts out in less time. My father undertook the job at once. He put all his works at it, with all the energy he possessed. He succeeded in making and shipping thirty of these mortar carriages in the unheard of time of three weeks, although all the steel had to be made for them. The first were shipped within six days. This work was billed at no profit to Cooper and Hewitt.

The bill for $21,000 for flat costs was rendered, but its payment was very much delayed. Cooper and Hewitt could ill spare such a sum at that time. My father finally decided to go to Washington and see the President. He later wrote:

"I was received on sending in my card, in advance of a large number of persons waiting admission. The President had never seen me before, although I had heard him deliver his Cooper Union speech, and, therefore, knew him by sight. He received me with great cordiality and said, looking me up and down from head to foot—'You are not such a Hell of a big man after all. I thought from the way you made those mortar carriages that you must be at least ten feet tall' ".

My father said that he then explained to President Lincoln the object of his visit. Lincoln expressed surprise that so small a sum should be held up, when the work had been so promptly done at no profit. He at once sent for Secretary of War Stanton, who knew my father well. Lincoln remarked to Stanton, "Do you suppose that if I should write on this bill, 'pay this now', the Treasury would make settlement?".

Stanton shrugged his shoulders. The warrant was sent for, and Lincoln wrote across it, "Pay this bill now. A. Lincoln." Not content with that, he added:

"Now, Mr. Stanton, I want you to do me a service. I am going to trouble you to go to the Treasury Department with Mr. Hewitt and see this bill through the proper channels for immediate payment."

Stanton did so. The bill was paid at once. Later, when my father was a member of Congress, he managed in some way to secure the original voucher, which he showed to me. It was burned with most of his other important papers when his library in the New York house caught fire.

The great chain, which lies on the ground before the mortar has been supposed to be a part of the great chain which was made to put across the Hudson River at West Point during the Revolution to keep the British ships from ascending the River. It was secured from a junk dealer named Westminster Abbey, who guaranteed it to be part of this chain. In later years it was recognized by an English iron manufacturer as one of the Admiralty Buoy chains which had been placed in New York harbor, and had been made by his firm. I analyzed the iron of the links and found it was not Ringwood iron, but Lowmoor iron from England. This, together with the fact that the links are not of the same length as those of the original chain at West Point, seems to establish the fact that this is not part of the West Point chain, although it is very similar and was made at the same period.

The gears and trip wheel for the great hammer were those used in the forge at Ringwood. We dug them out of the ground near the River. It was the hammering of the hot cindered iron from the forges, with water driven hammers such as this, which refined the hot iron and got rid of the slag. They also used such hammers for making bars of iron from the wrought iron made from the cast iron of the furnace in the forge fires. The hammer-head was mounted at the end of a great oak beam, which was raised and dropped by the trip wheel. The power was furnished by a water wheel. All heavy iron was forged by hammers similar to this until Nasmith invented the steam hammer in 1846.

This same Nasmith had an important part in the development of the steam engine. Watt was never able to use steam pressures higher than thirty pounds, because the heat of the steam destroyed any packing he was able to make for the piston in the cylinder. Nasmith, when still a young man, was given the job in a machine shop of putting the piston of a Watt engine in order. For this he invented the piston ring which springs out against the cylinder wall, and being made of cast iron, can stand high temperatures. From that time on, the steam engine made rapid strides in efficiency, due to the higher steam pressures which could be used. His invention of the piston ring has proved almost as important as the invention of the use of steam under pressure by Watt.

The collection of guns lining the walls of the main hall of the Manor house were originally a complete collection of all the small arms used on both sides during the Civil War. Mr. Hewitt ordered an example saved for him of each type when the arms were sold off by the Ordnance Department after the war. It should be noted, as a matter of interest, that there are a number of flintlock guns mostly used by the Southern armies. Also a revolver gun and the Sharps rifle, which was the first rifle whose barrel-rifling had an increasing pitch toward the muzzle. This gave the bullet faster spinning and the gun greater accuracy. At the end of the war the Spencer carbine will be noted which was a magazine gun carrying nine cartridges in a tube in the butt. There are several types of breech-loading rifles as well as many muzzle loaders.

This collection illustrated the rapid development of small arms during the progress of the war. It is regrettable that the collection is not now intact.

Metal was so scarce in the south that you will notice that the scabbard of one of the cavalry sabers was made of wood. It is evident that as the war continued the North had vastly better small arms than the South.

There is also, in the hall, a Revolutionary Queen Anne musket, with long barrel. This musket belonged to Andrew Hopper, who lived below Mahwah, and was used by him in a fight with some British cavalry raiders. The long barrel of this gun is similar to the nineteen barrels used by Peter Cooper in making the vertical tubular boiler for his Tom Thumb engine, which was the first locomotive engine to haul passengers in the United States.

The multiple barrelled cannon on the rail of the stairs came from some old ship, perhaps a pirate ship. Anyway, it was the kind of thing they used. When it arrived, my father wanted to find a place for it, and looking around, told us to fix it on the stair rail, saying: “It will be good to repel summer boarders”.

I was born in the big bedroom above the large central parlor, which is at the south side of the house. The furnishing of this room has not been changed since 1866, and I remember well that the bed, covered with chintz, is the same as it always was. The furnishing of all the upstairs bedrooms is the same as it was when I first remember the rooms. I do not think any of the furniture has been replaced.

There are many other most interesting relics about the place, as well as a number of artistic pieces, which are described in Mr. Cottrell’s book and the labels and signs on the exhibits.

CHAPTER V

BOYHOOD LIFE AT RINGWOOD

PERHAPS my earliest recollection of Ringwood is the memory of being taken with the other larger children to swim in the Mill Pond, which is just beyond the East gate to the grounds. Only about four years old at the time, I was allowed to paddle about the shallow water near the dam while the other children swam in the deeper water nearby. Of course, I tried to swim like the rest, but my progress was impeded by the shallowness of the water. When we came home to lunch, the others were bragging of how far they swam out in the deep water. Then I piped up, asserting that I could swim as far and as fast as anyone, only the trouble was that my tummy was so big it rubbed on the bottom and would not let me swim fast. A roar of mirth greeted this remark, and I was deeply hurt that they refused to believe me.

I was always making things with my hands, and getting up gadgets, even at a very early age. Watching the churn worked by the water-wheel making butter in the dairy, gave me the idea that I could also make a mechanical churn. In a few days I had made a small undershot water-wheel of half-inch boards, which was mounted in a trough which I set in the brook which ran from the pond in those days, behind the old blacksmith's shop toward the house. This piece of brook had a good fall and could be seen from the front of the house. The wheel turned on a nail on one side, and on the other side on a crank, which Sammy Morgan, the blacksmith, made for me. To this crank was attached the dasher of my churn, which was a quart glass preserve jar.

The next thing was to try it out and make real butter. Early in the morning, when no one was around, I went down to the cold room of the dairy and filled my churn with the thickest cream I could find. Just before lessons I started the churn. In those days we had our lessons in the front room of the house, to the east of the entrance, where my father later had his study. I could see the churn revolving nicely, as we began our work.

Of course, I was not an attentive student. What small boy is in the summer time? So I kept looking at my churn, which I noticed was going slower and slower, until it finally stopped. This was too much for me, and I jumped out of the window to the piazza and ran down to see what had happened. Lo, and behold, my churn was full of yellow butter, It should have been, as I had taken the thickest cream there was.

I brought back my prize in triumph to show my mother, only to be warned not to steal the best cream in the future. Anyway, I was delighted, because my first mechanical device had worked and done its job.

Our mother had an obsession about education. She felt that we should waste no time, even in summer. However, the hours for lessons were shorter than in winter—only two hours each morning.

A French governess, Mademoiselle Rogelin, presided over our instruction. Naturally, we did all we could to escape lessons. Her life must have been a burden to her. We soon discovered that if we could succeed in giving her what she called a "CRISE" we could often secure a holiday for several days. It became our main object in life to bring on a "CRISE".

She was dreadfully afraid of devils and ghosts, we discovered, and this gave me a fine idea. After some trouble I caught two bats, which I tied by the legs with fine silk threads to the head and foot of her bed. She always went to bed without a light, because of the midges and mosquitoes. No sooner had she taken off her things than she startled the bats, and they flew about at the end of the threads, which touched her head and arms. She screamed aloud for help, calling that there were ghosts and devils in her room. Fortunately for us, she broke the threads in her fright, and the bats escaped by the window, but Mademoiselle was a wreck for several days, living on "Tisane" and we had a fine holiday. She never suspected us, but really believed they were real ghosts or devils.

She bore me no ill will for all the tricks I played on her. When in France years later she wrote and asked me to visit her in the country near Tours, on the Loire River. She was living there with her mother who was 100 years old while Mademoiselle at that time was eighty. They had a very pretty cottage and a small vineyard which they found profitable. We parted the best of friends. With all my objection to lessons she had taught me French so well that I was often taken for a Frenchman from my conversation while in Paris.

When I was about eight, my sister, Nellie, had an attack of inflammatory rheumatism during the winter, which left her in rather poor health in the spring, when we moved to Ringwood. Dr. Herrick recommended that she have a goat and be with it as much as possible. At that time, goats were supposed to have some beneficial health effect.

Two goats were procured—one for her and one for me, together with a harness and a sulky for each. Nellie's goat was a large Billy goat, while mine was a much smaller Nannie goat. When we raced them with the sulkies on the long garden path, Nellie's goat Billy, always won, because he was so much bigger and faster. This made me search for some way to win a race. We had a large mastiff, which was much larger and heavier than Billy, the goat, and I was sure if he were in my sulky I would win every time. I hitched the mastiff to my sulky and challenged Nellie to a race. Unfortunately, I had neglected to train the mastiff to sulky driving.

When we started off, I at once drew ahead, but the dog became terrified at the sulky behind him, and bolted, throwing me out. He made straight for the front door of the house, which was open, with the sulky behind him. As it banged the furniture he became more and more alarmed, as he rushed through the hall and the two parlors. Then, seeing the outdoors through the glass door of the far parlor, he rushed right through it, glass and all, demolishing the sulky in the door and freeing himself. The house was a wreck, and we did not find the mastiff until next day.

The big Billy goat furnished us with endless amusement; he was such a good sport. At the west end of the house was a large piazza, perhaps twenty feet square. On it were a number of very large wooden rocking chairs, made of very heavy wood. We invented the idea of a gladiatorial show, with the goat as the wild animal, and ourselves the Christians. Each Christian was equipped with two wooden swords, made from shingles.

When our elders had gone out driving, we used to arrange the big rocking chairs on their sides in a large circle for the gladiatorial ring and place Billy inside the ring. A "Christian" would then be thrown into the ring to the wild animal and would have to fight for his life. He would rush up to the goat and pull his beard and then rap him across the horns with his sword. This always made Billy mad, and he would rise on his hind legs and try to butt the attacker out of the ring. Billy was no slouch of a fighter when he was mad. The Christian rarely stayed in the ring more than a few rounds before he was butted out of it. The winner was the one who stayed in longest with the goat. It is surprising we never got seriously hurt at this game, but we never did. We only nursed our bruises, never telling how we got them.

We had read somewhere about stag hunting, but had very hazy ideas of what the sport was. We confused it with pig sticking, I suppose. We all had horses, or ponies, but there was no stag until we thought of Billy. He would make a fine stag. Cooper and I went down to the carpenter shop and made long lances of pine to stick the stag with.

When all was ready, we took the goat on a rope and rode down the valley as far as the fields went, and then released the goat and prodded him with the lances. He refused to run like a stag, but only rose on his hind legs and butted the horses.

Finally, my brother Cooper said he could make him run. He got a tin can and tied it to his tail. Then the "stag" did run—in fact he went so fast we could not keep up with him. We never got a chance to use the lances. My mother happened to see the end of the chase, as we came to the barn, and we were well punished for ill-treating the goat, although we explained that Billy enjoyed the sport as much as we did.

We had another game which was original with us. It was great fun and very exciting. Along the side of the pond, below the house, was a stone wall, laid up with loose flat stones along the water. Wasps were in the habit of building their nests under the top stones. There were lots of these nests. The game was to make war on the wasps and get stung as little as possible.

We made paddles out of shingles about four inches wide. Each child was allowed two paddles, one for each hand. When all was ready the contestant had to walk up to a stone and move it with his foot, whereupon the wasps would come out and attack at once. The game was for the player to stand his ground and knock the wasps into the water with his paddles, until he was stung. Then it was the turn of the next player to try what he or she could do and how long he could stay before he was knocked out. Sometimes it was possible to knock every wasp in the nest into the pond and not get stung. This was Bogie. Quickness and accuracy were at a premium in this game.

We knew of a fleshy, green plant, with a yellow flower, which grew along the stream nearby, which was very juicy when crushed. If this juice were rubbed on a wasp sting the pain and the swelling disappeared in a short time. The only place where stings were serious was about the eyes. But if we had anything the matter with our eyes we could escape lessons, so there were compensations.

One summer a friend of my father's sent us a small black bear from the Adirondacks. When it arrived, in its box, it was so fierce that no one dared to handle it to place it in the cage we had made. Cooper and I at once invented a rapid way to tame a bear.

We got two stable blankets and opened the bear's box on the lawn, after teasing him so that he would chase us. Our idea was to drag the blanket behind us, rolling the bear over and over backward when he ran on the blanket. The plan worked to perfection After half an hour of this rough and tumble, the bear was so tired out that he was quite tame and we could handle him easily. We never had any more trouble with him.

The bear used to be chained to a post with a long chain. He always walked in a half circle, facing the dairy, whence his milk came. I discovered that this bear hated a dead fish, and if one were placed in his walk he would stand on his hind legs and stick out his lip every time he came to it, no matter how long it was left there.

The bear's liking for milk was an all-consuming passion. One day he broke loose from his chain just as the dairy maid was coming from the barn to the dairy with two pails of milk. The bear ran toward her, like a flash, and tried to get at the milk. Quickly she raised the pails to her shoulders, but the bear climbed for the milk. Finally her clothes would not stand the strain, as he pulled at her in his climb. Before he reached the milk he had pulled off all her clothes. She dropped the milk and ran to the house, screaming. After that it was thought best to send the bear to Central Park Zöo.

One year our mother let us build a sliding board, extending from the top of the orchard across the lawn, a distance of perhaps two hundred and fifty feet. The board was of pine, about twelve inches wide, and was well waxed with bees wax. Our sleds were thin ash boards, with a cross piece at each end carrying two runners of oak and guide blocks at the side to keep the sleds on the board. We slid down this board at great speed, with howls of glee, and came to rest on a long straight section at the far end, which was level. We had great fun with this slide, experimenting with the sleds to make them go faster.

Over a weekend, one autumn, my father had a house-party. Among his guests were Whitelaw Reid, the owner and editor of the New York Tribune, and Samuel J. Tilden, who had been presidential candidate in 1876, so nearly elected to the Presidency—both of them rather well along in years.

Mr. Reid and Mr. Tilden came down to breakfast early in the morning and, finding no one in the dining room, went out on the big piazza where we children were and suggested that they would like to try our slide, so we gave them both sleds. They walked to the top of the slide and started down, one after the other, in close succession.

The night had been very cold and there was still frost on the sliding board. The sleds came down like greased lightning. Instead of stopping before the end of the slide as usual, they went on over the end and tumbled the two elderly gentlemen badly across the lawn. It is a wonder they were not hurt. Of course, we knew that the slide was fast when frosted, but we never expected the two distinguished men would be quite so badly tumbled.

In front of the house, beyond the two rows of big trees, was a steep grassy bank, perhaps seventy-five feet long, on which my mother had expended much effort in getting it well covered with grass. But we children had other ideas about that, for we had discovered that when grass is burned brown by the sun, a barrel stave rubbed well with dry grass and waxed, will slide almost as well downhill on such grass as a sled will on snow. We had a great time one afternoon, while our elders were out, in sliding races down this bank of dry grass. By the time they returned we had almost completely worn out the turf which my mother had spent so much time planting. We were forbidden to do this any more.

But we wanted more sliding. So our next move was to go to the barn roof, over the big carriage house, which was covered with old shingles. The slide led down the steep roof to a flat roof over the harness room, which was covered with tin. We climbed to the top of the barn and slid down the shingles to the flat tin roof. It was the fastest slide we had ever seen. Only a few slides sufficed to loosen most of the shingles and punch holes in the tin roof. We were well punished for this destruction.

When we grew a little older, Cooper and I were often taken coon-hunting at night by the Negro miners. These Negroes were very superstitious. They would never pass a graveyard at night, as they were afraid of spooks. Nor would they pass a certain large split boulder in the woods, which they called the "spook rock". They said the spook was sure to jump out and grab you.

Naturally, these spook tales had much effect on us children; though we really should have known better, yet we were not quite sure whether to believe them or not, and we did not want to take any chances. At the close of one coon hunt, the shortest way home led by the graveyard and we debated whether we would go the long way round by the road, or pass the graveyard, as it was then just midnight. Finally, tired as we were, we decided we would take the chance and go by the graveyard. When we were just opposite Robert Erskine's tomb, which we considered the scariest place, I suddenly felt a cold, clammy hand pressed against the palm of my hand. I jumped about ten feet, screamed and ran like lightning. Every time I slowed down the same cold, clammy hand touched mine. I could hear soft footfalls behind me.

At last, out of breath, I looked around. There was our large stag hound, Freda, who, having heard us, had come out to meet us, and had been pressing her cold nose in my hand. That was my nearest approach to meeting a ghost; it was realistic enough to give me the fright of my life. Freda was one of several stag hounds directly descended from Sir Walter Scott's dogs.

My eldest sister, Amy, had many beaux. Some of them we liked, as they were nice to the younger children, but others were not popular with us. One man we particularly despised because he would never take part in any of our sport.

A coon hunt was arranged for a house party, which included him, but he was unwilling to go along and preferred to sleep. That night we actually got a nineteen pound coon, which we brought home in triumph. My sister's beau was leaving in the morning. While he was at breakfast we unpacked his bag, piled his clothes in the bureau drawer, and put the coon, which was just the right weight, in his bag. Of course, we thought he was going home to New York, and would wire for his clothes from there. Next morning the following telegram arrived from Newport—"Please send clothes. Coon no use for house party at Mrs. Astor's." My sister Amy did not marry this one.

I did not learn to read until after I was twelve years old. I knew that if I did learn I would have to study lessons from books, and I preferred to have my lessons read to me. I wanted to work in our shop, or play in the gymnasium, or roam the woods with George Waldron in summer. By pretending not to be able to learn to read, I was having more fun.

However, although I could not read, I built on my lathe in my New York workshop, a complete vertical steam engine, making the patterns and everything necessary myself. Having made the engine, I wanted to find a use for it, so I secured an old rowboat with which to make a steam launch. The boiler was procured from a second-hand shop in Centre Street, New York.

It did not take very long, after we had reached the country, to set up the steam launch and have it running. Of course, it did not work any too well, but still, it would go at a fair pace, at times, on our pond. The boiler was so wide that it was barely possible for me to get past it to reach the bow when coming in to make fast, but by rocking the boat and timing myself just right, I found I could get to the bow all right.

One Sunday, my father and some other gentlemen came down to the pond where I was working on the boat. One of them asked my father how much power the boat had. He replied, "From the best of my observation, it has one boy and a monkey wrench power".

One of my sister's beaux, dressed in white tennis flannels, was in the party. He wanted to try running the launch, so I got out, after stoking up the boiler, and showing him how to run it and reverse the engine with the original reversing gear which I had devised. He got in and it ran very well all around the pond, without mishap. He then brought it in to the stone wall where I kept it and tried to get to the bow by rocking the boat, as he had seen me do in order to make the bow fast. But he had not had my practice and got the timing wrong, so that the boiler hit him on the rebound, knocking him into the pond and upsetting the boat.

The water was about four feet deep, where the accident happened. Of course, the boat had never been cleaned. It was smeared all over with oil and grease. This floated up on the water, so the youth, in his white tennis flannels, was completely covered with black oil and grease. He was a sight. My sister did not marry this one either.

We children had heard tales of the lassoing of cattle in the West, as my father was part owner of a ranch in Wyoming, the manager of which had visited us at Ringwood and told us tales. Of course, we had to try this new game out, using clothes-lines for lassos. I became quite expert at lassoing posts and stones, and the other children as they ran about, but I wanted to lasso something more difficult and active. A calf, I decided, would be just the right thing.

Behind the big barn was a pasture where there were half a dozen good sized calves, just the right size to lasso, I thought. My rope was about sixty feet long, plenty long enough to play the calf on. My mistake was that I tied the back end of the rope securely to my leather belt, because I wanted to be sure that the calf would not get the rope away from me. I entered the pasture near the barn. The calves were feeding close by. It would be easy, I thought, to lasso the largest bull-calf of the lot. Then I got the surprise of my life.

The calf was stronger than I was and pulled me at great speed down the pasture, taking out all my rope, so that when the calf came to an apple tree at the far end of the pasture, he was dragging me by my belt, and I was all winded running after him. He turned the tree and started back down the pasture, but I fetched up, all blown, against the tree. I thought I could hold him now, and I did. But finding that he could not go on, the calf went round and round at high speed, winding me tighter and tighter against the tree. The end came with me securely tied up, facing a bull-calf almost as much blown and frightened as I was. I had to yell for help to get loose. The stable-man came and released the calf, and after a while unwound me. I had had enough of the lasso sport for the calf had all the fun.

Englishmen were never too popular with us, but one guest was particularly obnoxious. He insisted on going swimming with us. We had a swimming hole up in the brook in the woods, where we swam with nothing on. It was lots of fun. When we undressed, the Englishman sat upon a grass-covered ant hill, which we had carefully left vacant for him, and he left his clothes on the ant hill while he was swimming. These were the small red ants which bite so fiercely.

The Englishman no sooner got on his clothes than he was attacked by the ants in them. He scratched and yelled, and said he was on fire. Finally, he had to take off his clothes again and jump into the water, where we left him. Later, we sent the man up with some other clothes.

We did not suggest that he sit on that ant hill, but only left it vacant for him. There was nothing anyone could do to us—we were perfectly innocent.

In that same swimming hole there were a lot of large chub, which we often tried to catch, but we rarely got any of the really big ones. At our house there was an old Civil War muzzle loading gun. Cooper suggested that we take this, put in a big powder charge, and place the muzzle in the water so that, when it went off, it would jar the fish up to the surface and enable us to get the big ones.

I was always a little more cautious than Cooper, and advised tying the gun to the springboard at the swimming hole and discharging it by a string tied to the trigger.

We finally arranged it that way, and it was lucky we did. The result was a surprise to us. The fish turned up all right, but the gun disappeared back ward through the tree tops. It did not burst, but if we had held it we might have been maimed or killed.

One day we found a large snapping turtle about 18 inches long. We wanted him for a pet, to train him. A hole was bored in the back part of his shell, through which we fastened a piece of telegraph wire, which was then made fast to a strong post on the shore of the pond. We used to feed the turtle every day, but he never got any tamer, but would always snap at anything near him. Finally we became bored with him and decided we would find a way to stop his snapping.

One Fourth of July we had lots of firecrackers. We thought these might teach that turtle a lesson. We let him snap at a firecracker, and then lit the fuse. When it went off he only spat out the pieces of paper and was ready for another snap. Even crackers the size of my thumb had no effect in taming him, so we gave up the job and decided to have him for soup. Our Irish gardener was instructed to cut off the turtle's head. This he did with an axe, after he made the turtle snap on a stick so that he could pull his neck out. A little later we asked him if the turtle was dead. He replied, "He is that, but he don't realize it yet. He still snaps."

One summer we wanted a wagon which could carry a flat boat for use when we went to fish far off lakes, where there were no boats at that time. So we got the blacksmith to help us make a buckboard, which measured about ten or twelve feet between the axles. Both front and rear axles were made to turn by means of cross rods so that we could negotiate corners. When we tried this out we found that the oak slats making the bottom were not strong enough to bear the weight of three people, and sank down too far. So we moved the rear axle up, leaving about four feet of the oak bottom slats projecting at the rear. We were too anxious to get going to take time to cut them off.

The boat was carried on posts, as a roof to the vehicle. One day, as we were returning from Greenwood Lake, we met one of the Irish miners carrying his dinner pail and shovel. He asked for a ride, so we told him to jump on the back extension.

Cooper was driving. He looked at the man, turned to me, and said, "When I go over the next thank-you-ma'am, look and see where Paddy goes."

The horse was trotting, so that the bump sent the Irishman about four feet in the air. When he came down again, the slats were just coming up, and he got the spank of his life. We had to give him all the money we had with us to keep him from telling on us and getting us into trouble. He might have been seriously hurt.

When we were young, there lived on a farm on the hill bordering Shepherd's pond to the West, a family called Titabock. They were the descendants of the people who had originally cleared the land long before the Revolution, and had lived there always. There was an elder brother, and two maiden younger sisters. All were over seventy when I knew them. They were always kind to us children and always glad to see us when we walked that way. They always asked us into the house, and when it was mealtime, always begged us to take part in their meal.

They lived just as their fathers and grandfathers had lived, with no changes due to modern ways. All the cooking was done over the open fire in the big fireplace, either in skillets or in pots hung from the crane, or by heating in a small open-faced oven by reflected heat, which they placed before the red coals of the fire. It was here that I learned the old-fashioned ways of cooking, which came in so handy later in life when camping out. I never tasted anything better than Miss Titabock's corn pone made on a griddle over the open fire, or her buckwheat cakes or her sponge cake or cookies.

They used to have sheep, and spin all the wool for their own clothes, and also weave it on a loom, which was kept in a corner most of the time. They always did the weaving in winter. They also grew some flax, which they spun and wove.

Titabock made his own wagons and sleighs, and, of course, all the furniture of the house. They always had plenty of maple sugar. They seemed most happy and contented with their simple life and asked nothing better than to live on as their parents had done, with nothing more than they could get from their farm. Thinking about them, I am not so sure that our modern civilization has been all progress in the art of happy living. There never were happier people than these three. It is wonderful to have had a glimpse into lives as lived in past times, and think that everyone lived in this way in the country only such a short time ago.

One of the visiting plumbers or painters once showed us how to hypnotize a chicken, and it was not long before we had found a way to make use of what he taught us. He took a chicken, and placing its head under its wing, would whirl it around and around for a minute or two and then place its beak in contact with a long chalk line, which he had drawn on the floor. The bird would remain there hypnotized for a long time, perhaps fifteen or twenty minutes.

We had to find some way to get some fun out of this, and finally, as usual, a bright idea arrived. My mother went driving almost every day in the afternoon and came back about tea time, at five o'clock. After the carriage had gone, and it was about time for it to return, we caught a number of chickens and drew a chalk line on the floor of the carriage house. When we heard the carriage drive up to the house we began on the chickens, and laid them on the chalk lines on the barn floor, right in the way of the carriage when it would drive in. When it arrived, there were those hypnotized chickens right in the way, and Samuel, the coachman, had to leave the carriage outside and come into the barn and carry out all the chickens before he could drive in to unharness the horses. It would never do to run over the chickens.

Hiram Maxim, who afterwards became the famous inventor of the Maxim Machine Gun, was also the inventor of a gas machine which was supposed to be better than any then on the market. My father bought one of them and had gas installed in the Ringwood house.

The machine may have been a good invention, but it gave lots of trouble in operation, and Maxim very often came to Ringwood to set it right. We were very fond of him, as he was most amusing and always was trying things which he thought would entertain us. One of his visits occurred on the third of July, so he was there on the fourth.

In the evening we were setting off fireworks, as usual, and he suggested that a much better display would be made by dumping gasoline on the water of the brook and lighting it. The big brook flowed over stones, with ripples above the bridge, and the flames made a fine show in the dark, as they danced among the stones. Maxim had, however, forgotten that there was a wooden bridge just below this part of the brook. When the flames reached the bridge they set it afire, and it was burned up long before anything could be done to save it. We children thought this Fourth of July was the most exciting we had ever had.

The same man who showed us about hypnotizing the chickens also told us how chickens could be made drunk and behave crazily without using any alcohol. He got pumpkin seeds from the pumpkins we were making lanterns from, and fed these to the chickens. They ate them greedily, and after a little time began to behave in a crazy way. They would roll and stumble about and turn in circles, and often jump up and down and run in circles. Finally, they would just collapse and sit still. After awhile they seemed to get all right again, and seemed no worse for their drunk. I do not know what the active drug is in pumpkin seeds, but I do know that they have some real medical properties, as they are widely used in the Far East for removing tape worms and several British officers have told me that they are completely effective for this purpose.

When I was about fourteen, there occurred one of those outbreaks of lawlessness which sometimes happens in sparsely settled districts in America. A released convict, by the name of Storms, gathered about him a group of criminals, who made their retreat among the hills of northern New Jersey. They committed many robberies and a number of murders. In those days there was no rural police, so the inhabitants had to take the law into their own hands. It was reported that these criminals were in the neighborhood of Ringwood and it was likely they would raid the house some night.

About two weeks later I was with George Waldron in the woods north of the house. We were passing a large boulder some distance away, when he stopped and looked at the stone and said, "Those leaves near that stone have been disturbed, and they ought not to be like that. I want to see what did it." We went over and he brushed away the pile of leaves and there was a dress suitcase carefully covered. It was very heavy. He carried it to the house, and when it was opened it was full of fine silver, which evidently was part of the Storms' gang loot stolen near Pompton, which they intended to come back and recover. We later had a great hunt for this gang on Greenwood mountain, with about twenty men taking part in the chase. We saw one of the thieves, but were unable to come up with him and he escaped. Later on, Storms was captured in the Jersey City waiting room of the Erie Railroad and the whole gang soon caught and broken up. They never did any real damage at Ringwood, but they gave us fine excitement.

As the weather begins to get colder in the Autumn, wasps try to come into the house from outdoors to spend the winter, and it is easy to catch them as they are rather torpid at that time.

One of our visiting Englishmen, who did not know American insects, was particularly disliked by us boys, so we thought we would make his visit a little shorter. We caught about a dozen wasps and placed them in the lower part of his bed, between the sheets. In the morning, when he came down to breakfast, he had a hat pin, on which were speared the dozen wasps. As he came into the room he held this up to my mother, remarking, "I think it was the 'wasps' which disturbed my rest last night." His eyes were almost swollen shut. We did not shorten, but lengthened, his visit.

One day we were sitting on the front porch with several guests, and I was cleaning a small .22 rifle which I had been using for target practice before lunch. Cooper was seated on the cannon at the edge of the lawn, about one hundred feet away from the porch. He was smoking a cigarette, which he placed from time to time in the touch hole at the top of the cannon, where it just fitted.

Pierre Lorillard spoke to him when he came back to the porch, and asked him if he thought anyone could hit the cigarette in the touch hole of the cannon at one hundred feet, with the .22 rifle. Cooper said he would like to bet Lorillard could not do it. Pierre said he would make the bet on these terms—he would pay Cooper $1.00 every time he missed the cigarette, if Cooper would pay him $1.00 for every time he hit it.

I gave Lorillard the rifle, and set up a target for him to practice a few shots on. When he said he was ready, Cooper placed a cigarette in the touch hole of the cannon and Pierre shot. The cigarette was cut in two. This went on until he had won $10.00 from Cooper, who said he was tired of this game; it was a sure thing for Pierre.

We knew that he was a good shot, but never dreamed he could shoot like that. I do not believe there are many in this country who can do this stunt today.

CHAPTER VI

GEORGE WALDRON

When I was a young boy my mother felt I should be kept out of doors and in the woods as much as possible, because I had had malaria very badly and was none too strong. She engaged a country woodsman to be with us boys. Perhaps her idea was also to keep us out of mischief.

This man was a most extraordinary character, I realize now—one of those slow-moving, soft-spoken men, who are of such enormous strength that they are afraid they may hurt someone with it. One would never have guessed that George Waldron was the kind of man he proved to be. He had never learned to read or write, yet he knew more natural history of that region than any scientist I have ever known. He taught me nearly all I know about the woods, for which I owe him an infinite debt of gratitude.

The first time I ever realized that George was exceedingly strong was during a Christmas vacation at Ringwood. In front of the store, three men were trying vainly to lift a hogshead of molasses up into a sleigh. Such a hogshead weighs six hundred pounds. George looked at the three men for a moment and then said, "Get out of my way." Lifting the hogsheads by the chimes, with his fingers, he set it up in the sleigh. This feat was soon told all over the countryside.

During that Christmas vacation, Cooper had several young fellows up for a party, and they practiced boxing in the barn during a snowstorm. My mother was having some plumbing work done at the house by a plumber from Paterson, who fancied himself as a boxer. He had much more skill and experience, as well as strength, than Cooper's friends, and punished them rather badly. After watching this for some time, George slowly got up off his bench and asked to put on the gloves. The plumber was only too willing to lay out a country bumpkin who did not know about boxing. Before starting, George slowly drawled out, "Be careful not to hit me on the nose. That always makes me mad."

They boxed for a few rounds, until George got a good blow on his nose. This did make him mad, as he had said it would. He hit that plumber such a terrific punch under the chin that it lifted him off the floor and right across the table into a phaeton standing beyond it. It took a long time to bring the plumber back to consciousness..

George brushed himself off, remarking, "I told him not to hit me on the nose, and he did it. It is always unhealthy for anyone to do that to me."

Some years earlier George had heard of a lumberjack in Michigan, who was the bully of the whole region. George had journeyed all the way to Michigan to find that bully and see if he was as bad as he was reputed to be. He finally ran across him in a barroom.

"Are you the man who has licked everyone in this part of the country?" George asked in his slow, quiet way.

"I am," said the bully, "and I can lick you right now if you want."

They cleared the floor and squared off. It was a rough and tumble, even fight, until the bully hit George on the nose. Then he received a blow which knocked him across the room and right out through a window into the great open spaces, where presumably he saw stars.

This accomplished, George came home again, satisfied to leave fighting alone. He often told me that the reason he stopped was that he was sure he would sometime hurt someone.

At one of the many auctions which my father attended, he purchased a seven barrelled rifle, which had been made for an Englishman, who had been mauled by a tiger, and had ordered this special weapon from Ross to protect himself against another such experience. Perhaps the next tiger got him, as the rifle was put on sale. It was a beautiful piece of work, complete in its mahogany case, with bullet mould and powder charging outfit.

One day I could not resist trying out this gun, but did not want to shoot it myself. George Waldron suggested that we go to Negro Pond—where he knew there was a flock of black ducks which we could not reach with our shot guns—and try the rifle on the flock. When we arrived, we saw a flock of seven black ducks, about one hundred yards off shore. George climbed up on a big boulder to get a sight above the brush and sat down cross-legged, aiming the seven-barrelled rifle. I watched where the bullets went. They scattered all around the flock, but did not hit any of the ducks. When I turned to George, he was nowhere to be seen. Soon he poked his head up over the top of the boulder, remarking slowly, "It pushed me off the rock."

He had been rolled head over heels by the recoil. That was the last and only shooting of the seven barrelled gun. No wonder it had been sold by that Englishman. Last spring I saw this same gun still in the hall at Ringwood and recalled its one and only shooting.

In his own way, George was not only an expert woodsman, fighter and hunter, but also a keen businessman.

My mother's farmer cut off a lot of cordwood from the top of one of the hills, which had to be carted down to the main road by a long, roundabout way, as there was no direct road from this wood job. George asked him one day what it would be worth to him to get this wood down to the main road. The farmer said, "Seventy-five cents a cord." George said he would take the job at that price. I wondered how he was going to get that wood down, as he had no team of horses. It never occurred to me there might be some other way.

Next day George went down to the old blacksmith shop, collected the old wagon tires which were lying about, and took them up to the top of the hill with our buckboard. After clearing a path down the side of the mountain, he packed the cordwood in a roll inside the tires and wedged them fast. Then he rolled the round bundles down the hillside to the main road. It took him only a few hours to get all the wood down when he was ready for the job. The farmer was furious, as he had made many times his pay for a day's work.

Of course, George smoked a pipe. I asked him why he did not grow his own tobacco, and I told him how tobacco could be grown and cured. He asked me to get him some seed. It was planted in the spring, and grew to very large size. In the Fall he cut, dried and sweated it, and finally had it ready to smoke. When I came up next Spring, I asked George about his tobacco. He said, "You know, Mr. Eddie, it is a queer thing about that tobacco. I had a time getting used to it, but now I can't taste anything else. It's funny, but no one ever asks me for my tobacco any more."

One Fall, late in November, on a very sunny day, George and I were shooting patridge, with a pointer dog, when we came up over the crest of a mountain back of Sloatsburg. Suddenly the dog froze, his hair all went up on end. George at once called out, "Snakes, look out." I did not then know these signs in a hunting dog. We passed carefully by the dog, which refused to move and was trembling all over, and looked over the edge of the rock. Below us lay a flat stretch of rock, and on this, spread out in the sun, were about thirty rattlesnakes. They seemed to be enjoying their sun-bath.

We backed away and then hurried down to Sloatsburg and came back, after having secured several men together with some dynamite. By the time we got back it was rather late in the afternoon, and it was getting cooler, so that the snakes had retired, evidently into a large pocket of tumbled rocks. We exploded charges of dynamite in all the crevices and blew up the whole pile of rocks, finally killing thirty-two snakes before it got dark. Evidently those snakes had collected together for winter. After that, no rattlesnakes were seen in that section for a number of years.

In the Fall, when we would plan to start out shooting in the morning, George would often say, "Mr. Eddie, we don't need to take any lunch. All we have to do is to each eat a dozen of my wife's griddle cakes, and when it comes lunch time we only will have to pat our stomachs and those cakes will be right there all day."

George died rather young.

After I was married, Mrs. Hewitt used to read to me in the evening, when we stopped at the trout house, where George lived. He would sit on his heels by the fireplace and take it all in. One evening he turned to Mrs. Hewitt and asked her, "Mrs. Hewitt, don't those big words ever hurt you none?"

George was one of the best and dearest friends I ever had.

While we were stocking the Ringwood brook with trout of all sizes, we put out many small yearling fish and fingerlings, but they never seemed to last long in the brook, but disappeared in a few weeks or months. George Waldron, who watched all life carefully, was satisfied they did not die, or he would have found some of them at times.

One day he said to me, "Mr. Eddie, something is eating those fish, and whatever it is it must be doing it at night and we are going to find out what it is. You come to my house tonight, and we will take spear lights and go and look."

There were no flashlights in those days, and spear lights were made by constructing a sort of open box on a board about a foot long and eight inches wide. The ends of the open box were curved from the back toward the front, and the top of the box from the bottom around the curve to the front was covered with bright tin. This acted as a light reflector. On the bottom board of the box were placed five short candles, each stuck on a nail to hold it in place. A wooden handle about three inches away from the tin was used to hold the light. The tin acted as a light shield, and on a dark night one could see the bottom of the brook perfectly with such a spear light.

We stepped into the brook and walked upstream. We had not gone far before I saw an eel, about two feet long, but missed him with the spear, as I was not yet very skillful at this job, using the spear with only one hand.

Soon George got an eel and we cut him open. There were three small trout in his stomach. It was early in the evening yet, and the eels had not yet had much time to feed. Before we went home we cut open one with seventeen small trout in him.

This showed plainly where all our small trout were going, and that it was useless to stock in this way unless the eels could be prevented from getting in the brook. This, of course, was impossible. I never could see how the little elvers, coming from the sea, got over Paterson Falls, about sixty feet high, right in the middle of a city. They could not get around the falls and must have made their way up through the pipes and turbines at night in some way. Anyhow, eels were always very numerous in our brooks and we often speared them weighing as much as five pounds, but most of them were about three pounds.

One day George said to me that it had rained a little and spearing ought to be good that night and he would carry all the eels I could spear. He brought along a meal sack to carry them in.

We started in at the trout house below the store, and speared up to the dam of the big pond below the Manor House. I got 26 eels and George had a back load so heavy he could hardly carry them, and made me quit spearing. He was all tired out when we got back to the house. This shows the number of eels which were in this brook at that time. Since then, spearing has been prohibited by law. I doubt very much if a few good fish which were speared ever counted for half as much as the saving of fish from the killing of the eels. I believe that eel spearing was of great benefit to all our streams, and should not have been stopped. Anyway, it still goes on, the men tell me, and the eels are more plentiful than ever. Game wardens cannot be all over at night.

The larger trout in our hatchery pools began to disappear at night, and although George spread fresh sand on the paths, which would leave foot prints if anyone came at night, he found no marauders. Then he made up his mind that the thieves must come through the air. He set steel traps along the side of the pools, where the fish were disappearing, and also on small boards set on posts in the water, and explained to me that if anything came at night it would want a place to rest on.

The next morning, after the traps were set, he had three big horned owls in the traps. Two of them already had trout inside them. They would kill and eat trout of any size but preferred those about six inches long.

After that he caught large numbers of these big owls until he had them about exterminated. After this was done, the trout again began to disappear, and this time he suspected two-legged thieves.

I had a small single-barrelled pistol, which we tied up in a tree and it was loaded with blank cartridge and fixed so that it would fire into a can of black powder, with which I mixed some flash powder. The trigger of the pistol was fastened to a wire which was run close to the ground on the path near the pond.

A little after midnight the pistol went off. George rushed down to the pool and found two very scared Negro boys in the water, where they had jumped when the flash went off. They thought they had been shot at, and that there had also been a stroke of lightning. After that the negroes let the pools alone. But every season we had the same trouble with owls. They seemed to come from all the surrounding country for the trout. They are the most destructive vermin on trout, except the big blue heron, which fishes both day and night, and can eat any number of fish and will spear in the head all those he can reach, which are too large for him to eat. They should certainly be declared vermin in all waters inhabited by trout.

George Waldron not only took care of the trout, but also helped us with the game, as both Cooper and I were passionately fond of shooting. In those days there was still quite a lot of wood-cutting going on and there were many wood jobs of various sizes growing up in all parts of the property, which afforded fine cover and food for birds.

Market hunting was the custom in those days, and for many years thousands of partridge were shipped to market from the two railway stations on the property. Usually the number was about five thousand each year. This went on for a great number of years and the partridge never seemed to get less in numbers, due to the shooting.

George explained this to me, saying that each of the market shooters was also a hunter over the rest of the year, and kept busy killing all kinds of vermin which they knew injured the partridge, from which they made their money each Fall. I know that this is so, because I hunted foxes with many of these men and also shot hawks with them and trapped weasels, mink, skunk and house cats. They knew perfectly well that the vermin killed far more game than the gunners every year. I had many proofs of this in the years I followed the shooting at Ringwood.

One winter I came up to spend a weekend, and it snowed in the night. Next morning I went out with George and we soon came upon a weasel track, which we followed. We had not gone far when we found it had killed partridge, eaten the bird's brains, and gone on. We followed this beast all day long and finally came up with it in a hollow stump, out of which George drove it and I shot it, after we had found where it had killed six partridge during the night and the next day. How can birds stand this kind of thing?

One season I had not been well, and the doctor said I ought to spend all the fall in the country, which suited me perfectly. George and I spent all the fall and early winter trapping around the Ringwood valley. We were out every day, setting all kinds of traps. George did not care much for steel traps, but nearly always used the old-fashioned dead fall set with a flat stone and crossed sticks in a figure four, with the bait on the treadle. He generally used rabbit meat as bait, but sometimes special baits for certain animals when he had found they were specially fond of something. Fish was always good bait for mink and cats.

We set our traps all around Ringwood valley and along the brook. All kinds of animals were caught, and the net result of our trapping was:

70 wild house cats, 75 skunks, 17 minks, 12 foxes, 21 weasels, 3 wildcats.

The interesting thing was the result on the patridge the next season. Usually when the season opened we would go the first day all around the Ringwood valley, hunting all the best places carefully. We had never seen more than thirty or forty birds on the first day's shooting. The season after we cleaned out the vermin we put up 165 partridge going around the valley the first day, and had the finest shooting we ever had seen. This proved to me that the abundance of partridge was due almost entirely to the absence of vermin, and not to the absence of gunners.

Years later, when I had a moor in Scotland, I found that the same conditions existed there. Wherever the moors were carefully patrolled and the vermin kept killed off, there was always plenty of grouse—if the moors were burned properly to give the birds the right young heather food. Wherever the vermin was neglected, the numbers of birds decreased at once. After the last war it took a number of years to again build up the moors, because the keepers had been so largely at the war that the vermin got the upper hand. In Scotland they shoot the moors down rather closely each season and the young birds make up for all those shot, and the moors always have plenty of game on them if they are well tended. Keepers told me they had never seen a moor too closely shot to have a good crop of game on it next season, if the vermin are kept down. Unless, of course, there happened to be a very wet season in the Spring, which might kill some of the young birds.

In my own place in the Catskills I have again tried out the experiment of killing off the vermin, with much the same results as those at Ringwood. One year I hired a very skilled trapper to trap the vermin on my place, and was surprised at what he caught—25 foxes; 28 wildcats; 9 horned owls; 6 weasels; he also shot large numbers of hawks. The next year partridge were far more plentiful than they had been in years.

Of course, trapping only a small area does not really do very much good, because the vermin move into this area just as soon as the game becomes more plentiful. Vermin extermination can only be successful if it is done over wide areas, as it is in Scotland. The county of Perthshire alone ships over 1,000,000 grouse each season, which is more game birds than are shot in all the eastern Atlantic states together.

I have long been of the opinion that our whole game conservation policy was wrong, and it has been proved to be a failure, as there are not nearly as many birds now as there were years ago, when market hunting was the custom. In trying to limit the shooting of game birds they have also eliminated the men who used to kill off the vermin which preyed on the birds, and the vermin does far more damage than all the shooters, as they work all the year long under all conditions.

Every scientific game survey which has so far been made has shown that the vermin kill off most of the game now and that the gunners only get a very small part of it.

This does not seem very intelligent to me. If the system were changed, and game were allowed to be sold, as it is in Europe, there would be some incentive on the part of property owners to raise and protect game. The State can never put out enough game from its rearing farms ever to affect the shooting over large areas to any great extent. If the State were to do so, it would be far too expensive a project.

The plan I would like to see tried out is to allow market hunting again, under license to market hunters to sell game, with the provision on the license that each hunter who sold game must furnish proof that he had killed during the previous season certain numbers of specified forms of vermin which are known to be destructive of game.

How can we hope to have game and at the same time have closed seasons on foxes, skunks, weasels and other vermin, which can now only be killed for short times during the year, while they prey on game all the time?

Either we should endeavor to raise fur animals, or game birds. We can't do both together successfully when one eats the other. This doesn't make sense. The best time to destroy foxes is when they are having young, and can be killed in their dens. They could never reduce foxes in Scotland if they did not kill them at this time of year. The value of a skunk's pelt is certainly not worth the eggs of the game and song birds he destroys.

I have given up hoping to see any sense displayed in our conservation work in respect to game. It will always result in failure as long as the present methods are followed.

CHAPTER VII

INCIDENTS AT RINGWOOD

When we were young children there was no regular church at Ringwood, so my father got Dr. Peters to come up once or twice during each summer to conduct services in the schoolhouse and christen the children. He came back from one of these visits earlier than usual and Mr. Hewitt asked him what was the matter. He said that sixteen children had been presented for christening but as the mothers had refused to give the names of their fathers he had refused to officiate until they decided who were the fathers.

He then announced that he would return again at three in the afternoon for the christening, and if they had not decided by then who were the fathers of the children, he would christen them anyway and assign the names of fathers he thought most likely.

This threat was completely successful with the Negro population, and in the afternoon all the children were given family names, which no doubt some of them bear today. As he told his story on his return from the schoolhouse, he said that he was not yet through. My mother, he remarked, had a boy almost four years old, who did not yet have any name, and he would christen him that afternoon and give him a name if she did not select one.

This started a violent family discussion on the big piazza, but they failed to decide on any name, so Dr. Peters put on his robe and stood up and said, "As you have failed to find any name I will christen him Erskine, after the tombstone in the graveyard which I passed on my way from the schoolhouse." The nurse held Erskine who held out his finger at Dr. Peters and shouted "Bang". Perhaps the tombstone name made Erskine what he was.

The narrow gauge railway running from the Peters mine to the store ran a distance of about two miles or more. The cars ran down by gravity and were pulled back by mules, after the ore had been dumped at the store, for shipment on the railroad. One of our favorite trips on a Sunday afternoon, when we had guests, was to walk over to the Peter's mine, take a car and run the whole party two miles down to the store, leave the car, and walk back home. It made a fine afternoon's walk.

When we could get guests who had not taken the trip before, to go with us, we always had fun with them. After we had them in the car we would tell them that at the end of the road there was the high dump at the store, where, if the brakes did not work, the car would run to the dump and throw them down twenty feet or so into the ore bin. On the way down we would pretend that the brakes did not work well, and let the car go as fast as it was safe to go, only slowing up where we crossed the main highway. We would whoop a yell to warn any vehicles on the highway of our approach.

The brakes, in fact, were wonderful, and would stop the car any time in a few feet. They braked on all four wheels. We would run fast right up to the dump before stopping the car, and the guests always got a real thrill. I remember Mr. Samuel Tilden was so scared that he was very pale when we stopped. This was great sport for young people.

We used to take all kinds of long walks, which were much more interesting in those days than they would be now, because roads were few, and we had to know the wood trails. One of the favorite walks was to the top of Hope Mountain, where there was a fine view. It happens that the Hope Mountain area is a great place for rattlesnakes, perhaps because of the great rock piles from former mining and the tunnel which was driven into the hill to draw off the water from Hope Mine. This place was the wintering place of the rattlesnakes. We saw them a number of times near the top of the mountain in a crack which is filled with leaves. Anyone making this trip must beware of rattlesnakes, as those reptiles are no doubt as common now as they were in my boyhood. I know of no place where one is more likely to meet them.

The road leading from the Ringwood house to the Peter's mine, and the road from the Hope Mine to the house, were both used for over one hundred years for the carting of ore to the Ringwood furnace. The heavy wagons wore ruts in the granite rock wherever the ledges cross the road. In some places they are several inches deep. Thousands of tons of ore were carted to the Ringwood furnace over these two roads.

On one of their frequent trips to Europe, my father and mother visited Warwick Castle. On the grass of the great central court, which is now a lawn, they saw two wonderful peacocks strutting about, which were remarkably beautiful in this fine, old historic setting. My father at once conceived the idea that they would be equally decorative on the lawn at Ringwood, so when they returned in August he ordered two fine male birds to be sent to the country. The peacocks arrived one Saturday morning, and were placed on the lawn so that my father could see them when he came from town. They made a fine show at teatime, and everyone was delighted with them.

The following morning, about six o'clock, my father, evidently much enraged, appeared in my bedroom in his dressing gown. He called out, "Eddie, get up at once and get your gun and shoot those two damned birds. They have kept me awake with their damned squalling since sunrise." I did as I was bidden, and shot the two birds at once.

This was my only chance at peacocks. I had heard of the wonderful Roman banquets of Lucullus, where they had dishes of peacocks' tongues as delicacies. I had them for breakfast, but I did not think much of Lucullus' taste in food.

My mother was much put out at the shooting of the birds, so she had them mounted. They were placed in the hall of the New York house, on the stair-rail from the lower floor, where they successfully performed their fabled function of preventing marriages. My two younger sisters never engaged in matrimony.

In the fifties and sixties of the last century one of the most profitable departments of the Trenton Iron Works conducted by Cooper and Hewitt was the rerolling of iron rails when they had become unserviceable due to the flattening of the iron at the top of the rail by the constant pounding of the cast iron wheels over the rail. The tops gradually spread and finally broke down at the side of the top, which might cause accidents, derailing trains. Steel had not yet become cheap enough to be used for railroad rails. That only came to pass when the Bessemer process successfully produced good, cheap steel for the first time.

The Erie Railroad, at that time, had large amounts of iron rails which had to be re-rolled periodically, and Cooper and Hewitt had the contract for all of this work. When Jay Gould secured control of the Erie Railroad, he wanted to discuss this contract with Mr. Hewitt, my father, who invited him to visit Ringwood.

They talked in the parlor after dinner, while my mother sat at his side and knitted. When they went upstairs, my father asked Mrs. Hewitt what she thought of Mr. Gould. She replied that she did not trust him, and that Mr. Hewitt should have nothing to do with him in business. "Why?" he asked.

"He has shifty little eyes, and long flat feet, and I never trust that kind of man," his wife replied.

Events soon proved that my mother was right. Cooper and Hewitt lost the Erie contract because Mr. Hewitt was unwilling to increase the contract price and divide half of the increase with Mr. Gould personally. My mother's intuition about people was often uncanny.

One autumn one of our distinguished guests was Mr. Longmans, the well-known English publisher. We found him a most delightful man, very much interested in archery. He had, in fact, made the championship shot in England for distance. He told us a lot about bows, and what could be done with them, and became very enthusiastic about the Tartar bow, which is made of spring steel backed up with rawhide. He said that shots, with this type of bow, had been made of over 1400 feet.

In walking through the main hall he noticed a fine Japanese war-bow, which he got us to take down from the wall. He found that this was the best type of wooden bow and a very fine specimen. Next day he wanted to try it out for distance. Luckily, there were some very good war-arrows with the bow.

We managed to make a good bow-string from some new tennis racket gut I had, and went out on the lawn in front of the big piazza to try it out. He made three shots and, when measured, all were over 1200 feet. We then got into conversation about the penetration of arrows shot in this way, compared with smooth bore muskets and rifles. The war-arrows were equipped with sharp steel points, which, when shot at copies of the

Congressional Record which we took from my father's closet, would go through 160 sheets of the paper.

Then we tried out an old smooth bore musket and found that the bullets would pass through 90 pages of the book. The bullets from a Winchester .45 caliber rifle, with black powder, only passed through 152 pages. We were all much surprised at the great effectiveness of the bow and arrow when handled by an expert.

CHAPTER VIII

RINGWOOD GUESTS

Among our summer guests during the eighteen-eighties were the Princess of Schleswig Holstein and her daughter. They stayed a week or so and everyone found them a great bore because when they came into the room everyone had to get up and bow and wait until they were seated. They were very formal and did not seem at all bright to me. The Princess looked somewhat like Queen Victoria, and was fat and dumpy.

When they returned to Germany the Princess sent us a pair of black Dachshunds, which were supposed to be the finest of that breed in Germany. They were very clever, nice dogs and we all liked them. The dogs were great wanderers, although they never could make much speed with their queer legs. In a few years a strange thing began to develop among the dogs of the countryside. As one drove up the valley from Pompton to Ringwood, the legs of the stray country dogs got shorter and shorter. In fact, one could tell in ten years just how far one was from Ringwood by the length of the legs of the local dogs.

My father had an old friend in the iron business in England named Williams. He controlled one of the largest iron businesses in England. He had a son about twenty-one years of age, who had evidently been more or less of a waster, and old Williams could do nothing with him, so he decided to send him to America, with a letter to my father, which did not make the situation very clear.

Of course, he was at once asked to Ringwood, where he stayed, and stayed, without any sign of going. He soon paid violent attention to my sister, Nellie, who had far too much good sense to take him at all seriously. Finally, his attentions became so boring that Nellie went to my father and said that either Williams would have to go, or she would—she was not going to remain in the house with him.

My father, faced with this situation, called Williams into his study and laid the case before him. Williams at once said that he could not go as his father had only furnished him with enough money to come to New York and he was entirely out of funds. He said that he was willing to leave but could not for lack of money. My father had to pay his passage back to England, where he became reconciled to his father, and finally became the creditable head of his father's great iron business, worth many millions. Perhaps Nellie cured him, who knows!

While the family were on a trip to England, they were asked to visit Lord Burton, who makes the famous Burton ale. He seemed to take a fancy to Sally, and said he would send her a cask of the famous fine old Burton ale. This finally arrived at Ringwood, and was duly put in the wine cellar and forgotten.

Lord Charles Berresford was a frequent guest at Ringwood whenever he was in this country, as he was the best of company, and a brilliant talker. One afternoon, after lunch, we told him of the old Burton ale in the cellar, and he wanted to sample it, so we went down and tapped the cask and drew out a small pitcher of the ale, which was dark, foaming, and cold.

Berresford took one drink and said it was the finest thing he had ever tasted, so we proceeded upstairs and sat on the porch, where he had the pitcher of ale handy with a glass. We did not like the drink at all, but he seemed to think it was wonderful, and had two or three large glasses of it. Presently we began to notice his head nodding and then he almost fell from his chair. I went and got the butler and together we all carried him up to his room and put him to bed. He was just boiling drunk and all in.

Cooper and I took the ale and examined it in our small laboratory by distilling out the alcohol and found, to our surprise, that it was 33% alcohol. No wonder Lord Charles collapsed with three large glasses of it. However, he was in fair shape the following day.

On another visit Lord Berresford, who remembered the ale and did not want any more of that drink, so we reminded him that he had never yet sampled our American apple-jack. We told him that it was a delicious drink and that we had a small barrel of it in the wine cellar, which had been there for twenty-five years and should be just right by that time. He wanted to taste it, so we went to the wine cellar with some straws and a small drill. I put a hole in the top of the barrel and he put in a straw. He said it was mild, and most delicious; in fact, so mild that it would not have any effect on anyone. He had quite a few pulls at the straw, which was a large one. Lord Berresford got upstairs all right but in a few minutes his head began to nod and off he went to sleep. Again we put him to bed. My mother was furious with us, as she thought we had made him tight. We really had no intention of spoiling a perfectly good distinguished guest.

He did not, however, bear me any grudge for the way I had treated him. When he became Admiral of the Home Fleet he sent me an invitation to join the Fleet as his guest for its Channel cruise, which would have been an unique experience, but unfortunately I could not go abroad that summer and I lost my only chance to be the guest of the Fleet. If I had had the barrel of old Burton ale with me I am sure I would have been a most welcome guest.

Berresford was one of the famous Berresford family, which has always produced fighters in every generation. Once, on a Derbyshire visit to Mr. Wright, I was driving with my host, when we passed a small castle near the road with a large square tower. He remarked, "Lord Charles Berresford rode from that castle accompanied by his nine sons to go to the Crusades with Richard Coeur de Lion."

Another distinguished guest at Ringwood, late one autumn, was Lord Stanley. We happened to have some very fine half shell oysters sent up from town for dinner. As English oysters generally taste of copper, and are not very pleasant, they are not commonly eaten at dinner, and at that time were unusual as a household food.

Lord Stanley was captivated by our fine American oysters and could not praise them enough. After he returned to England my father sent him a barrel of oysters in the shell at Christmas time, arranging to have them well iced and cared for in transit. He did not hear from Lord Stanley for about two months, and wondered if the oysters had ever arrived. Then a letter finally came. Lord Stanley wrote that the oysters had arrived, but no one in his household knew how to open the shells, but it had been noticed that a few oysters were already open and that the family had waited for the rest to open before eating them. He wrote that he was just recovering from a mysterious digestive illness.

When the New York and Greenwood Lake Railroad failed as a business enterprise, it was finally sold at Sheriff's sale to the highest bidder. My father bought the railroad in order to keep it running so that he could continue to ship the ore from the Ringwood mines. He operated it for a number of years, finally disposing of it to the Erie Railroad without making any loss or profit on the whole transaction.

During the time he owned and operated the railroad, he used to furnish us with a special train to take a large party to Ringwood during the winter for skating. Sometimes these parties took place at Thanksgiving, when there was ice, or at times during the Christmas holidays.

I cannot see now, how my mother ever arranged to provide the food for all this number of people, and get the house open and heated for us, but she did, and there never was a hitch in any of the arrangements. We always had a wonderful time, and invitations to these skating parties were eagerly awaited in New York.

There was a Cuban gentleman who always came to our parties. He greatly enlivened them. His name was Fernando Yznaga and he was always playing tricks on Sally. I remember his skating up to her on the ice and putting a small piece of ice down her neck and calling out, "Winter sports, Miss Sally." He played tricks on her, even in New York. I remember his coming in to tea one day and saying that he had just become a collector. Sally was always collecting bric-a-brac of all kinds. She at once pricked up her ears and inquired what he had decided to collect. He replied that he had decided to collect one million of these, and laid down on the tea table a ten dollar gold piece which he had received as a director's fee. He did have seven million when he passed out, and had made a good beginning on his collection.

At a party at the Tuxedo Club, where we were all skating, he played another trick on Sally, which made her quite furious. She had small feet and was very proud of them, as she had no other beauty. It was the custom, those days, for everyone to put their shoes outside their bedroom doors to have them cleaned. When Sally had gone to bed, Fernando took a large pair of men's shoes and put them beside Sally's dainty shoes, outside her door. Everyone, of course, saw the shoes there, as her room was right at the head of the main stairs. She was furious with him, but she liked flattery and attention so much that she soon forgave him.

My sister Amy's wedding to Dr. James O. Green was the largest party we ever had at Ringwood. It took place in the autumn, in wonderful weather. Of course, the house was crowded with guests, and they were parked wherever we could find room for them. There were large numbers of visitors from Tuxedo and from all the surrounding country. A special train was run up from New York to bring up town guests. In those days, before the automobile, all the local guests arrived in horse-drawn traps of various kinds.

The ceremony took place in the large hall, and the bride and groom came down the big stairs to the wedding. With the beautiful flower decorations and autumn leaves, this made a most picturesque setting. After the wedding, the day was so balmy that lunch was served on the porches and lawns. The bride and groom were driven away amid a shower of rice and flowers.

There never was a more beautiful wedding, contrasting so sadly with the attempted wedding of poor Miss Ryerson, more than half a century before, which never was completed. This is her sad story:

Many years ago an old lady drove up to the Ringwood house and asked to see Mr. Hewitt. My father happened to be at home and was glad to receive her. She said she was Miss Ryerson, the daughter of the man from whom my grandfather had bought the Ringwood property. She said she wanted to look over the old house where she had been brought up as a girl. My father was delighted to show her around and tell her of the changes which had been made in the house.

He had a very long talk with her during her visit. It seems that Miss Ryerson was, in her girlhood, the greatest beauty of Northern New Jersey. She was the toast of all the richest young men, as her father was reputed to be very wealthy at that time, and the house at Ringwood held continual parties in her honor.

Finally, she became engaged to a rich young man of New York. The wedding was to be the grandest affair ever to take place in the countryside. The wedding day came. But when the hour for the ceremony arrived, there was no bridegroom. He never appeared. Nor did he ever make any excuse for his conduct. Miss Ryerson's two brothers went to New York and found the recreant bridegroom walking on the Battery Parade in the late afternoon. There they publicly horsewhipped him before all the crowd.

Miss Ryerson never married. Her father's large fortune went from bad to worse, until his property was finally sold for debt at public auction, where my grandfather, Peter Cooper, purchased it. Miss Ryerson told my father that she was almost eighty years of age, that she was well cared for in Montclair by relatives who were in very moderate circumstances. She said that she had had no money for years, and would like to have enough to be able to take rides on the new electric trolley car—a luxury she had never been able to afford.

My father told her that she would have money of her own as long as she lived, and he provided her with an income of one hundred dollars a month for the rest of her life. I saw her later on, and she thanked my father for the comfort and happiness which she had enjoyed in her later years. She lived to be over ninety.

No one but myself knew that my father had done this for her. He did not even tell my mother. He was always doing kind turns for people, and frequently they never knew who their benefactor was.

When in Paris one summer, my father had dinner with the well-known banker, John Monroe. At the dinner was M. Guestier, of the firm of Barton and Guestier, of Bordeaux, the famous wine merchants. Mr. Hewitt asked him if he could recommend some new vintage of a good Bordeaux wine, which could be purchased now, and be put down to age in the cellar. He replied that they had just had a most marvelous vintage at a certain vineyard and that he could fully recommend this as it would become a wonderful wine in about twelve years.

My father ordered two casks of this sent to Ringwood, where it was placed in the wine cellar. About twelve years later we happened to have as a guest a well-known French nobleman, whom my father wanted to entertain well, so remembering the Bordeaux, he told me to go to the wine cellar and draw off some of the wine from the cask and have it for dinner. This I carefully did, and it was served at just the right temperature.

When I put the glass to my lips the odor of the wine was like that of an old mousetrap, and the taste about the same. I felt, of course, that the wine had spoiled. My father tasted it and evidently felt the same way, as I could see from his expression, but he said nothing, as the French Count was just sipping his wine. A beatific expression spread over his face, while he asked where my father had ever secured such a wonderful Bordeaux. My father told him how he had ordered it from M. Guestier, in Paris, but did not extol its quality, which he felt was execrable. Our French guest then asked how much he had of this wonderful wine. My father told him two whole casks. He then wanted to know if he would dispose of any of it. My father said he would let it all go at a price. The Frenchman then offered a very high figure for the wine and the deal was closed, then and there. The wine was re-shipped to France. Evidently mousetrap taste and smell is at a premium in France. I have no doubt it was rare, as I have never tasted another such wine.

During a large house-party, later in the autumn, we had all gone into the dining room. There must have been about twenty at table. We sat down and waited but no butler appeared, and no dinner. The time dragged on to a half hour, and then we heard a great uproar in the kitchen to the rear of the dining room. My mother told Cooper and me to go and see what was the matter with the dinner. Colonel McCook happened to be seated near the door to the hall, and as the noise had increased, he got up and went out with us.

When we reached the kitchen the butler was pursuing the French cook around the kitchen table, holding a big carving knife in his hand, and the cook was screaming at the top of her lungs. As he made a last lap around the table she grabbed a tall pail of milk which stood on the table and dashed it all over the butler, drenching him from head to foot.

Colonel McCook grabbed the butler's arm and took the knife away from him, then we led him to his room and locked him in. The cook was such a wreck that she could do nothing more about the dinner, so the guests turned to and made as good a dinner as they could, and waited on themselves. Even this dreadful scene did not ruffle my mother's calm in the least. She acted as if such things were quite usual, and everyone had a fine lark. She was a most wonderful hostess.

My father was fully aware of the way the place at Ringwood was run and the great expenses incurred there by my mother. While he never tried to interfere with what she wanted to do, he sometimes poked fun at her surreptitiously. At one large luncheon he happened to be near a distinguished English guest when the butler asked the Englishman what he would like to drink. My father turned to his guest and said, loudly enough for my mother to hear him: "You may have either milk or champagne. They cost the same on this farm."

One incident, which happened while we were living at Garden City during the early years of my marriage, deserves to be told, as it is unique in my experience of society.

I was one of the earliest owners of an automobile, when it was still necessary to procure a locomotive engineer's license to drive a car. The Locomobile steam car which I had, gave any amount of trouble, and required great mechanical skill to get anywhere with it. The smokestack from the boiler originally came out on each side of the body, near the top of the back. Wind would blow into these outlets and cause the flames to blow out below the boiler, so that they endangered the car.

I put two smokestack chimneys, one on each side of the body, to try and prevent this trouble. A great improvement resulted, which made the car safe, so far as I could see. On this car the only place to carry baggage was on the flat top of the rear of the body, and we had a square wicker hamper strapped there for our clothes when we travelled. A spare tire was attached to the rear of the car.

One day my mother telephoned Mrs. Hewitt that there was to be a big house party and dinner at Ringwood for the Duke and Duchess of Marlborough, and we were to come up for the weekend. My father, when he was Mayor of New York in 1888, had married the

Duke and the former Mrs. Hammersley at the City Hall, and this was their first visit to America since her fortune had rebuilt Blenheim.

We packed our wicker hamper full of evening clothes and set out about eleven o'clock in the morning from Garden City. The whole run was only a little over fifty miles. We had no trouble, and ran along smoothly until we were approaching Jamaica. We were going along a new road that had high banks on either side, and apparently the gully formed gave the wind at our backs a particularly good sweep at our firebox. The flames came out of the vents once more, and also from below, but this time with violence, setting fire to the spare tire fastened to the rear.

I stopped the car, jumped out, and shut off the fire and extinguished the fire of the tire by rubbing it in the dirt at the side of the road. The clothes hamper had also been exposed to the flames, but seemed only slightly scorched.

We got across town and over the ferry without accident, and drove on through New Jersey. Then, near Ringwood, some ball-bearings in the front wheels were crushed; the wheels had to come off and the new balls put in. There were also two or three punctures of the single tube tires and one of the repair plugs blew out and had to be replaced, so we arrived at my mother's house just in time to dress for dinner.

When we got to our room, which was the room where I was born, I opened the wicker hamper only to find that Mrs. Hewitt's dress, which was on top, had been rather badly scorched in the waist. The skirt was all right. However, my mother's maid, Vallé, came to the rescue and took the waist away and sewed on tulle, ruching, lace and what-not, making it look even better than before. Mrs. Hewitt did not need fine clothes, anyway, in those days, to always be the best-looking and most distinguished woman in any gathering. When she was ready to go down she asked me how I was getting on. I replied that I was all right, since my dress suit had been at the bottom of the hamper and apparently had not been damaged at all.

There were twenty at dinner, and I found myself sitting between great puffed sleeves, looking at my plate through the crack. By crushing them a little I hoped to get some dinner. During the fish course I began to feel cold about the knees, but thought nothing of it. Then later, when the whole lower part of my legs began to feel uncomfortably cold, I investigated with one hand, only to find to my horror that I had on no trousers at all. The trousers, lying in the hamper, were folded so that the whole front crease on both legs had been close to the side of the hamper where it was scorched, and the cloth had been burned through along the creases. The pressure of the knees, as I sat down, had made the cloth give way and the trousers had split wide open from the hips to the floor.

I could not imagine what I was going to do, although I am not unduly bashful. I am afraid my conversation suffered, as one of the ladies asked me what I was thinking about so intently. I made some evasive answer, continuing to fear the end of the dinner. I was really busy devising a way to get out of this novel situation. Finally I decided what to do.

In those days it was the custom for gentlemen to conduct the ladies to the drawing room and then return to the dining room for smoking and liquers. When everyone got up from the table I got up just a moment or two late, so the other guests already had their backs turned to me. Then, holding my large napkin across my lap, I just walked in the other direction, into the butler's pantry with the remains of my trousers dragging out behind, protecting the rear view. I made my way up the backstairs to my brother Cooper's room and borrowed a pair of his trousers, which were just the same size as mine, and came down again to the dining room, where the gentlemen had already gathered. I don't think anyone noticed I had been absent, and if someone did, he doubtless thought I had been taken suddenly ill. But when I told Mrs. Hewitt about it in the drawing room she laughed until her eyes were wet, and could not keep the story to herself. My escapade was really the success of the party after all.

This was our last trip in the steam driven Locomobile. I could put up with mechanical accidents, and fix them up, but when it took to taking off my trousers at a big dinner party for the Duke of Marlborough, I would never know what trick that car might play on me next.

CHAPTER IX

HOUSE PARTIES

On one of our winter house parties there happened to be a fine snow for sleighing, so we got out the big sleigh and had a fine ride in the moonlight, with all the bells on the horses we could find in the stable. When we got back, it was quite late, and we drove the sleigh directly into the barn before anyone got out.

Among the party was a Mrs. Meade, who possessed a very fine string of large pearls, which was well known at that time in New York society. Like many women, she believed that pearls lose their luster unless they are worn continually, so she always wore them about her neck, under her clothes, and no one knew that she had them with her on this visit.

When we arrived at the house, after walking up in the fresh snow from the barn, she gave a scream when she took off her wraps. She suddenly felt that her pearls were gone. The ladies looked into her clothes and found the string which had held the pearls had broken, and allowed all these large pearls to slip down beneath her clothes to the ground. There was no way of knowing where the pearls had dropped.

Cooper and I got lanterns and began our search at the barn. It seemed most likely that the break had occurred when she got out of the sleigh. It was snowing slightly, and even the footprints we had made going up to the house were then nearly covered. We brushed the snow carefully from every foot of the path from the barn, kneeling down on hands and knees. We had not gone more than 100 feet when I found a pearl below the soft snow on the hard snow below. It looked a little darker than the snow and could easily be seen.

This was a long string of very large pearls, worth perhaps $25,000 or $30,000. Cooper soon found another pearl, and from then on we kept finding them for about 100 yards, and after that no more. We kept hunting for several hours, and found about two-thirds of the string, although Mrs. Meade did not know for sure just how many there were. Next morning we renewed the search and found all but two of the number she thought she had. These two were never found, and someone may yet make a rich discovery. They should be somewhere in front of the old dairy house, along the path to the barn. It is a miracle that we succeeded in finding as many as we did.

My mother always wanted to do everything which would add to our pleasure and interest, so she let us build and operate a trout hatchery at the Cold Spring, which was in the valley just below the store. This site is now covered by the reservoir.

We succeeded in raising vast numbers of trout, which we put out in the Ringwood brook and in the other streams nearby. For many years the trout fishing was wonderful. Ladies used to take part in it, as well as the men.

I remember one day fishing down the river with Dr. Rainsford, the well-known pastor of St. George's Church, New York. He was fishing far ahead of me, around a bend in the brook. When I turned the corner I saw that his fly was fast to the bushes of the opposite bank, and he was taking off all his clothes so that he could get over the deep water to retrieve his cast. There were bushes of willow scattered along the bank, and he did not see me, nor know that I saw what he was doing.

While he was wading across the stream I slipped up and took all his clothes and hid them back in the bushes, and then retired from sight to see what would happen, as I knew there were some ladies nearby. When he came back to where he had waded in, he looked for his clothes in an astonished way, but just then heard the ladies approaching, so he again crossed the stream and hid in the bushes until they had passed.

While he was hidden I replaced the clothes. Soon he timidly came out of the bushes and again crossed the stream to find his clothes where he had left them. I did not hear him mention his escapade when he returned to the house, but he certainly got a good fright. He was always very attentive to the ladies, and it was current gossip at Southampton, where he often officiated in summer, that he always wore his bathing suit under his gown during the service, so that after church he would be the first of the male congregation to reach the beach after the service.

One of the ladies, who used to often come and stay at Ringwood, was a very beautiful woman, who was very vain of her looks. We all knew this, and just waited for a chance to take her down a bit, if possible.

One day, when the family and guests were talking on the piazza, she said that her one consuming desire in life was to have a streak of golden hair in her auburn hair, as it would add so much to her looks. This was our God-given chance to grant her wish, and no one could punish us if her wish came true. Next day, after she had taken a swim, she washed her hair, and came down to the piazza, where she lay down in the hammock, spreading her hair out on the pillow to dry.

We watched carefully, until she had gone to sleep. Then we rushed upstairs, got a bottle of peroxide, and wet her hair all down the middle part, so as to make the golden streak she so much desired. When she awoke, her one consuming wish was granted. Her hair had a beautiful streak of gold right down the center. When she realized what had happened she was furious, instead of delighted, but there was nothing she could do about it in a remote country place. She went about during the weekend as she had always wanted to be. The next time I saw her in town the streak had vanished.

A few years later the same lady came again to a houseparty, where she put on such airs that we again felt that something should be done about it. Every room in the house was occupied by members of the house party. We got the idea that while the guests were playing "hide-and-seek" after dinner, we might be able to do some mischief in her room and make her as uncomfortable as possible.

My father had been a friend of Sir Henry Bessemer, the inventor of the process for making Bessemer steel, and had first introduced the process into this country. Bessemer had presented my father with a life-size bust of himself, cast in Bessemer steel, which my mother had painted white, but it had become yellowed with age, so that it looked flesh-colored.

This bust, of course, was very heavy. It weighed probably two hundred and fifty pounds. Our plan was to take this upstairs, place it in the bed of the lady with the airs, and make up the body with the bolster, so that it would look like a man in the bed when she came upstairs.

Two young men helped us carry Bessemer upstairs, because it was far too heavy for us boys alone. The entire house party, except the lady, were tipped off, and told to lock their doors, and not pay any attention to any calls for help.

Finally the party went upstairs. At once there was a loud scream from the lady's room. "There is a man in my bed." But no one paid any attention to her outcry. When she could not get any help she investigated, and found old Bessemer to be a very cold customer in bed. She tried to remove him, but she was unable to budge him at all. So she slept on a chaise lounge all night, while Bessemer peacefully occupied her bed.

In the morning there was a dreadful row, but we boys had early gone fishing for the day, and the trouble had all blown over by the time we returned.

One of our favorite forms of entertainment, when we had large houseparties of young people, was playing hide-and-go-seek in the dark, after dinner in the evening. There never was such a wonderful place for this sport as this great house.

My mother would not let us use the two small parlors, but we were confined to the two large parlors, the halls, the two small rooms at the east side, and the dining-room. With the whole place completely dark, except what light came in from the night outside, it was an eerie task to try to find all the members of a big party. When found, they had to retire to the small parlors and wait for the next game.

I very soon discovered that when couples were very attentive to each other, when I was "IT" they would tip me not to find them until the last ones. Lloyd Bryce, when he was courting my cousin, Edith Cooper, once gave me five dollars if I would leave them to be the last to be found. Is is any wonder that I was always willing to be "IT".

CHAPTER X

FAMILY IDIOSYNCRACIES

BESIDES the regular house-servants, my mother had a number of people on her staff, who are not usually employed even in large households.

There was so much furniture in the New York and Ringwood houses which had to be kept in order that she always had a resident upholsterer at all times and he was kept busy both in re-covering stuffed furniture and repairing broken pieces. I never saw him when he did not have a lot of work ahead. Watching him and working with him almost taught me the trade, so today I can do anything required in my own home without outside help. I owe a great debt to old Beuler for the trouble he took with me in teaching me the tricks of his trade, and I can assure you there is no trade in which faking can be done so easily.

Another retainer was the carpenter, Dietrich Keulke, who was a German cabinet-maker of the greatest skill. He could do wonderfully fine work and even good carving. He was most patient with me in teaching me how to use tools well, and particularly how to sharpen them and keep them in perfect order.

One of his useful tricks was the conversion of cherry, or other hard woods, into wood resembling ebony. He always made a fine job of it. He used to boil log-wood chips for a long time and then brush the cherry-wood over a number of times with this water in which the log-wood chips had been boiled. This water penetrated the wood quite deeply and the wood could then be sandpapered and would take a fine polish and look just like ebony. There are many tricks in the cabinet-maker's trade, which I was taught from time to time, and which I find most useful today in making furniture for my home and for presents for the family and friends.

The coachman, Samuel Littel, was quite an exceptional man, of rather good education and a wonderful man with horses. He used to break all the colts and saddle-horses grown on the place. One of these was a particularly fine thoroughbred, which proved so nervous and spirited that Samuel had a very difficult time in breaking him at all.

One week-end Tommy Hitchcock was a guest and he came down to the training-ring to watch the breaking in. Samuel was not having any too easy a time with the horse, so Hitchcock asked Sally if he could saddle and ride him, as he was sure he could handle him in a short time.

Of course she consented, and after some difficulty he mounted the horse. No wild west broncho ever proved any wilder, but Hitchcock was one of the best of horsemen and kept his seat easily. Then the horse began rearing, and walking on his hind legs. At last he jumped up in the air as he reared, and came down backwards just on his tail, which he broke, so that it set out side-wise. Hitchcock was very crestfallen and apologetic for having damaged the horse.

Sally tried to get the tail fixed by an operation by a veterinary, but it was not very successful and the tail was always crooked. When Hitchcock saw this on another visit, he felt so badly that he insisted on buying the horse from Sally at a good price. He then gave the horse a long course of training in jumping, and this horse, Windbeam, proved to be the prize jumper of all the horse shows for many years, making a number of jumping records. Windbeam became very famous in the horse world, despite his crooked tail.

Visitors' books were kept at Ringwood from 1876 until the house was finally closed—a period of over fifty years. They contain the signatures of many distinguished people, and are almost a register of high society of that period. Among the visitors were many artists, and the books contain many fine drawings and sketches, as well as poems written for the place. These books are now in the library of Cooper Union.

My sisters, and to some extent, my mother, had a horror of ever throwing away any nice box. They always kept every one which they did not immediately use. When they died, both the New York house and the Ringwood house had their closets filled with empty boxes of all kinds. They also had whole drawers filled with string, taken from packages. No one was ever allowed to cut a string. One would suppose it was a crime. I fear this habit has descended to me, somewhat, as I hate to cut a string, but always untie it. I also keep boxes, but not to the extent of their becoming a nuisance.

Miss Nellie always directed the garden, and took charge of all the fruit grown there. She would have the pears, apples and peaches picked and put in the room below my father's bedroom, where she would sort the fruit on tables and set it out to ripen. She had a horror of having any go to waste, so she would pick out the fruit to use just as soon as any spots showed on it, and as there was lots of fruit the spots always got the better of her, and she never got around to giving out any of the good, sound, unblemished fruit. I do not remember her ever letting us have any fruit which was not spotted, or partly rotted. She always said this had to be used up first.

This was a very sore point with the rest of the family, but she was firm and kept her fruit store locked up and we never got any good, sound fruit.

My mother was brought up by her mother in the old-fashioned ways of running a house, and she never changed, as long as she lived, from her mother's teaching, no matter how many servants she had.

In the old times they always made soft soap for all laundry work, especially for washing woolens, and no good housewife would ever use hard soap for anything woolen, as they said it would shrink the wool and make it hard. My mother made the cooks save all the fats and when there was enough she would have a barrel of soft soap made in a big kettle outdoors. I have often seen them doing it, always under her watchful eye.

This was done by heating some water in a large pot to boiling, and then putting in the fat. When this was well melted and hot, potash lye was slowly added and the pot boiled until the soap was made. They used to test the soap from time to time by mixing it with water. When it would all dissolve, and no fats show on the top, the soap was ready. I can still remember the soft, steamy smell of that nice soft soap. Ordinary hard soap is made with caustic soda, and not with potash. In the old times all the potash was derived from wood ashes.

She was quite right about the soap. Soft soap is far better for all laundry work than any brands of hard soap, such as are so widely advertised at present. Most people of this generation have never seen, nor used, good, old-fashioned soft soap.

They used to tell me a story, when I was little, that when George Washington cut down the cherry tree, Mrs. Washington had the wood burned to make the lye for making soap, and when they boiled the kettle, they boiled, and boiled, and boiled, and no soap ever came. So finally the old darkey came and told Mrs.

Washington that the trouble was there was no "lie" in that cherry-tree!

My mother was always saving in everything, and hated to see any waste. She thought that bar-laundry-soap wasted much more if it was soft, than if it was well dried out. She used to get a box or two of bar-soap and place the bars in the attic near the chimney, where it was warm, so that the soap would dry out. This would take place in a few months. Then she would give it to the laundress to use. The laundress would at once put the soap to soak in water so she could get some use of it. This comedy went on as long as my mother lived.

Sally had her bedroom over the back end of the large hall, next to the side entrance from the driveway. In those days there were no electric bells in the house, so when she wanted the maid she used to open the window and blow a loud blast on a long coach horn, which could be heard all over the house and far down the valley. Even when bells were installed, she still preferred to use her coach horn, and I heard her use it the last time I stayed at Ringwood. She never changed, as she said the bells might be out of order, but her coach horn was sure to bring the maid. Guests who heard this horn for the first time always asked where the coach was running, as they never saw one.

CONCLUSION

I LIVED at Ringwood every summer from the time I was born in 1866 until after I had completed college, in 1890, except for the periods when I was away on trips. After my marriage, in 1892, we moved to the little red house by the Ringwood store in 1894, and my son, Ashley, was born there. We spent several summers at Garden City, where we had a house, or at various summer places, until my mother purchased the Boardville Farm from Mr. Wheeler, and let us have it for our residence. When she died she left a provision in her will that any of her children could select a residence place from her property at Ringwood, or could take in place of this $25,000.00.

I selected the Boardville Farm, and we lived there until this was taken by the Water Board for the reservoir, under condemnation. We moved out in 1925.

It will be seen from this that my very close association with Ringwood lasted from the time I can first remember, about 1870, until 1925—a period of fifty-five years.

Mr. Hewitt died in January, 1903. My mother continued to live at Ringwood, in the summer, during the rest of her life, which ended in August, 1912, while I was abroad. The Ringwood place was left to my two sisters, Sally and Nellie. They kept up the place during their lives—Miss Nellie dying in November, 1924, and Miss Sally in October, 1930. At her death, Ringwood was left to my brother, Erskine, who, not being married, did not want to keep up this large place for himself alone. He finally closed the house and lived in a cottage on one of the Cupsaw Lakes until he died in May, 1938. He gave Ringwood Manor to the State of New Jersey in 1936.

The Ringwood house was never the same to me after my mother's death. Life seemed to have gone out of the place, and I no longer cared to visit it. To me, it was the home of the family, full of all kinds of family associations. It seems suitable to me that no other family will ever live there. It was a most wonderful home, where everything that could make for the pleasure and recreation of a growing family took place. I hope I have been able to give others a glimpse of its history and of our life there, as that kind of life has probably disappeared forever from the American scene.

EDWARD R. HEWITT.

5155